Gendered Labour Process and Flexibility:

A Study of Jewellery Production in India

by

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To my parents

TABLE OF CONTENTS

List of Figures

List of Tables

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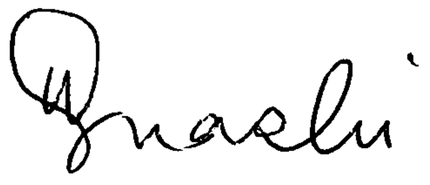
DECLARATION

I declare that this thesis is my own work and has not been submitted for a degree at another University. I have one article forthcoming in a book, which I list below. This is based on the materials collected for the thesis. However the analysis in the article does not form a part of the thesis.

'Income Control and Household Work Sharing Experiences in the Lives of Women Workers in Machinemade Jewellery Production in Noida Export Processing Zone' in Rita Mae Kelly, Jane Bayes, Mary E. Hawksworth and Briggitte Young (eds.) Globalisation and Democratisation, Rowman and Littlefield Publishers (forthcoming).



Urvashi Soni-Sinha

Abstract

This study focuses on the production of handmade and machinemade jewellery in three sites in India: Noida Export Processing Zone (NEPZ), Delhi and Medinipur. It draws from and contributes to two strands of literature and extends them. One is the gendered literature on export processing zones (EPZs) and export oriented industries (EOIs). The other is the literature on globalisation, feminisation and flexibility.

The thesis poses two major research questions. First, how are jobs in jewellery production constituted as masculine or feminine? Second, how do masculinised and feminised jobs relate to flexibility?

The evidence I use to answer these questions is based on materials collected in the course of two field trips to India, of nine months and two months duration between 1996-1998. A questionnaire survey, non-participant observation and semi-structured interviews were used as methods of data collection.

Contrary to much of the literature on EPZs, machinemade jewellery production in NEPZ is predominantly male with 25% female work participation, and handmade jewellery production in NEPZ is entirely male with no female work participation. Handmade jewellery in Delhi has a marginal representation of women as family workers. Only in handmade chain production in the villages of Medinipur is the female labour predominant, in the form of hidden women homeworkers, constituting 64% of the labour time. My study shows that the gender division of labour is not a fixed or given entity but a product of discursive and material practices, which are reproduced through discourses into which different actors invest, and which feed into the gendered subjective identities of these actors. The study breaks down the assumption of a formal labour market in EPZs. There is a wide prevalence of male child labour and subcontracting in all three sites of handmade jewellery production. Contrary to the literature on EPZs and EOIs which show that it is the feminised jobs that are flexible, in machinemade jewellery production in NEPZ there is a slight feminisation of flexibility but it is not very significant. In the handmade jewellery sector in NEPZ and Delhi, labour market flexibility is occurring with a largely masculinised labour force. In Medinipur all labour is flexible and since there is greater representation of women in the labour time, there is some feminisation of flexibility. So no clear linkage can be drawn between the feminisation of jobs and flexible labour within the jewellery industry in India thus complicating the debates on feminisation and flexibility. The study underlines the importance of localised industry studies which are not bounded by a particular space.

List of Abbreviations

EOI/s: Export Oriented Industry/ies

EPZ/s: Export Processing Zone/s

EL: Earned Leave

ESI: Employee State Insurance

MMTC: Mineral and Metal Trading Corporation

NEPZ: Noida Export Processing Zone

PF: Provident Fund

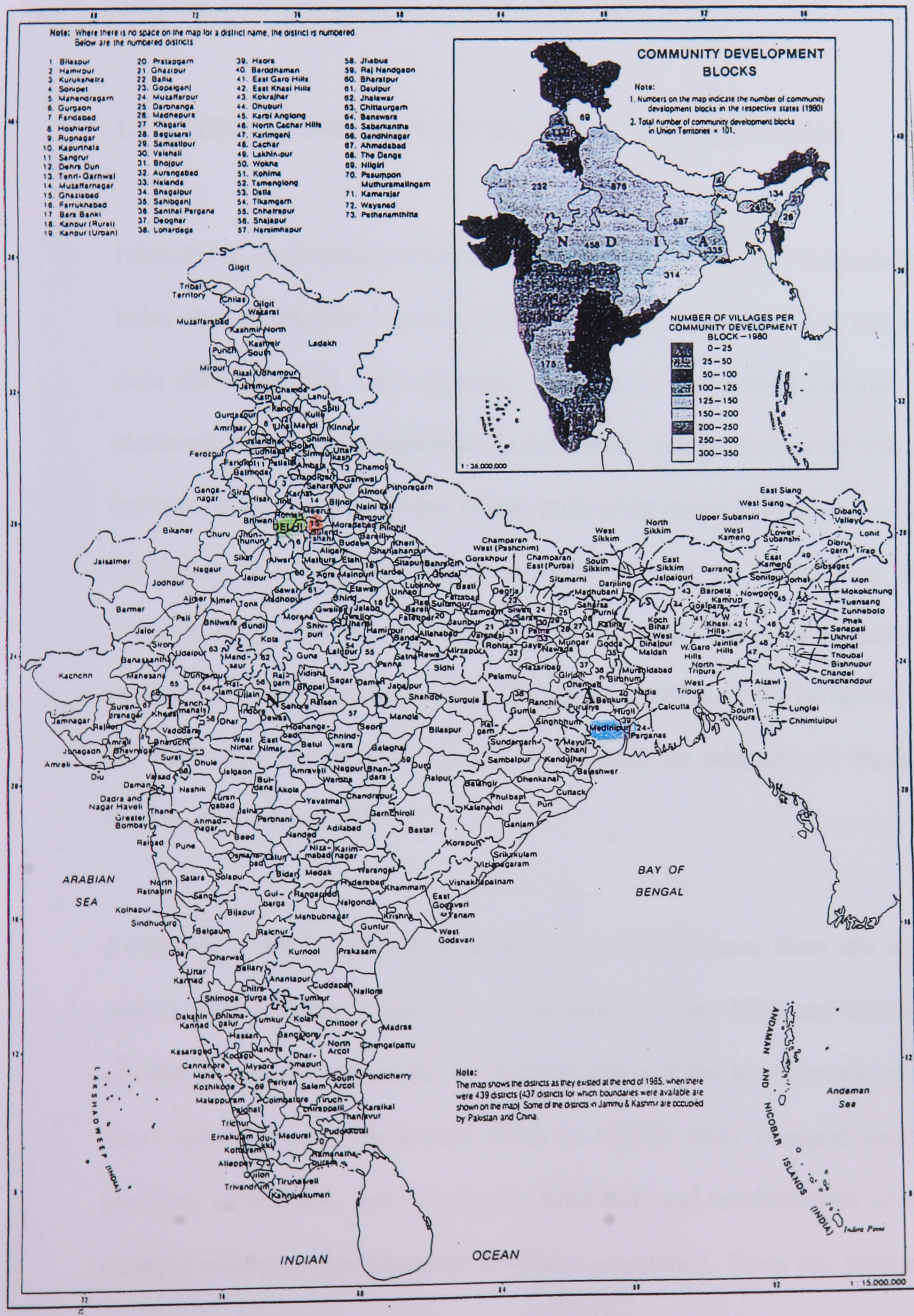
SAP/s: Structural Adjustment Policy/ies

SE Asia: South East Asia

SEEPZ: Santacruz Electronic Export Processing Zone

Map1

Map of India, with Three Sites of Study, NEPZ, Delhi and Medinipur, Marked



CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND AND MOTIVATION FOR THE STUDY

I decided to study gendered labour processes in Noida Export Processing Zone (NEPZ) in India after reading the literature on export oriented world market factories in South East Asia (SE Asia) and Latin America, which notes a majority presence of women in the electronic and garment industries. In the Indian case there are very few studies of export-oriented industries (EOIs) and export processing zones (EPZs) and my understanding of the Indian labour market made me question how far the literature on SE Asia and Latin America would apply to India. It seemed especially pertinent to study the processes of gendering at the micro level of an industry in an EPZ, in the context of the globalisation of the Indian economy in the mid 1980s and the adoption of Structural Adjustment Policies (SAPs) in 1991.

I chose to study the jewellery industry in NEPZ because there are very few gendered studies on this industry, and none in the context of any EPZ, and also because gems and jewellery exports account for the highest share of the total exports of NEPZ. I found three major types of jewellery units in NEPZ: units engaged solely in handmade jewellery production; units producing handmade and machinemade jewellery; and units engaged solely in machinemade jewellery production. From my preliminary talks with

the management I learnt that some of the handmade jewellery units in NEPZ have branches in Delhi. This gave me an opportunity to respond to the lack of a comparative standard for women's work in EPZs, as indicated by Lim (1990). By including the branch units in Delhi in my study, I could compare the working conditions of women in the zone to those outside the zone. I also planned to make comparisons of the conditions of work of women and men. However, some of the original intent changed and evolved as the evidence emerged, and gave way to new research questions that were more pertinent in the context of the evidence.

In contrast to the literature showing a majority presence of women in EPZs, I found a total absence of women workers in handmade jewellery production and only 25 percent representation of women in machinemade jewellery production in NEPZ. I also found that contrary to the expected formal labour market conditions in the zone, there was a wide prevalence of informal labour market conditions in handmade jewellery production. The labour market here was characterised by real and fictive kinship-based induction of male labour from the villages of Medinipur. Subcontracting and the prevalence of male child/young workers were other important features of the labour market. Handmade jewellery production in Delhi was similar to NEPZ, except for an important difference - there was a marginal presence of women as unpaid family workers here. All this evidence shifted my interest and priorities, as the comparisons Lim was calling for became both difficult and less significant.

The exclusion of women from handmade jewellery production in NEPZ, and their marginal incorporation as unpaid family workers in Delhi, got me interested in the nature of women's participation in jewellery production in Medinipur, from where the majority of the male artisans migrate. The inclusion of Medinipur not only widened the scope of the study but also enriched my understanding of the labour process of handmade jewellery production in NEPZ and Delhi. I found that in contrast to NEPZ and Delhi, women were the majority in handmade jewellery production in Medinipur. Women here were predominantly engaged in chain weaving from the confines of their homes and were hidden discursively and socially.

I used a questionnaire survey, interviews and non-participant observation to collect data on the units in the jewellery sector in NEPZ and Delhi. I carried out interviews with entrepreneurs/owners, contractors, artisans, employees, and child/young workers - all of whom were male - in handmade jewellery production in NEPZ and Delhi and with women unpaid family workers in Delhi. I interviewed male and female entrepreneurs/managers and employees in machinemade jewellery production in NEPZ. The visit to Medinipur involved interviewing male contractors, subcontractors/artisans and women homeworkers and unpaid family workers.

The evidence of the varying participation of women and men in different sites and forms of jewellery production and the interrelated complexities of the labour processes, brought me to my first research question which is:

1. What are the gendered processes that constitute the feminisation and masculinisation in the different sites and forms of jewellery production?

I answered this question through an analysis of different discourses about the gendered labour process and their interrelationship with the gendered subjectivities of different actors, which both feed into and are fed by material and social practices.

I found that the different social and material practices, the discourses and the subjective identities were mutually constitutive. My analysis of the dynamics by which the labour process is gendered, focusing on the concepts of discourse and subjectivity, extends the existing literature on EPZs, which has been dominated by socialist feminist approaches. This fills an important gap in the literature indicated by Parpart (1993) and Ong (1988).

Restructuring of the world economies in the 1980s has given rise to debates around globalisation, feminisation and flexibility. In the context of debates in the macro-economic context, I have analysed the relationship of feminisation and masculinisation to flexibility in the microeconomic context of my study. I have examined the synchronic dynamics of the construction of different processes and sites as feminised and masculinised and their relationship to flexibility. The second main analytical question raised in the context of my study therefore is:

2. How does feminisation and masculinisation in the different sites and forms of jewellery production relate to flexibility?

My study has gone beyond the employer-worker dyad to explore the nature of flexibility in different forms and sites of jewellery production and the experience of flexibility of different actors - entrepreneurs, contractors, subcontractors, child/young workers, employees - both male and female. I have also examined the issue of autonomy and control for the different actors in my study.

Flexible labour market conditions are widely prevalent in all the three sites of handmade jewellery production and occur with a largely masculinised labour force in NEPZ and Delhi. I argue that there is a hierarchy of contracting and subcontracting in all the sites of handmade jewellery production, whereby the actors in the more powerful positions pass on the disadvantages of financial and numerical flexibility to actors in less powerful positions down the subcontracting chain. Meanwhile, actors in the less powerful positions in the chain attempt to move up the hierarchy of subcontracting. However, this process is deeply gendered, women being the only actors who have no potential to pass on their disadvantage of being a source of numerically and financially flexible labour to any other actor, nor to move up the hierarchy of subcontracting. In machinemade jewellery production there is a slight feminisation of flexibility overall, but it is not significant. My micro level study complicates the debates on flexibility and gendered labour process by showing that different contentions hold in different sites and types of jewellery production.

1.2 STRUCTURE OF THE THESIS

In Chapter 2 I review the gendered literatures relating to EPZs and EOIs, and globalisation, feminisation and flexibility. I outline the conceptual framework that I use to analyse my research questions, which emerge from the literatures. Chapter 3 goes on to detail my research methodology and the process of doing research. I take up the epistemological shifts I made in moving from economics to women's studies. The complex interaction of inductive and deductive methodologies in the field, my sampling frame and the issues of power and 'othering' encountered in the field are discussed.

Chapter 4 describes the production process for machinemade jewellery in NEPZ and handmade jewellery in NEPZ, Delhi and Medinipur. It describes the labour process, detailing the gender division of labour and wage systems in different sites and forms of jewellery production. The chapter provides the background for the two analytical chapters that follow. Chapter 5 takes up the analysis of the processes of gendering in the different sites and forms of jewellery production. The chapter analyses the interrelationship between discourse, gendered subjectivity and social and material practices which produce a gendered labour market.

Chapter 6 analyses the relationship of the gendered labour process to flexibility. Two subsidiary analytical questions relating to the nature and experience of flexibility for different actors and their degree of control and autonomy are also taken up in this

chapter. Chapter 7 concludes with the major findings of my thesis and the contribution it makes to the existing literature. It also indicates the scope for future research.

CHAPTER TWO

LITERATURE REVIEW: GENDER, FLEXIBILITY AND THE LABOUR PROCESS IN GLOBALISED PRODUCTION

2.1 INTRODUCTION

This chapter is a review of the core literatures which helped in developing my research ideas and to which my study will contribute. I will discuss two main literatures. The first is the gendered literature on EPZs and the second the more recent literature on globalisation, feminisation and flexibility. From this discussion and critique will emerge my own research questions. The research question/s in each section are followed by a discussion of important concepts which I draw upon to analyse the question/s. This has meant using eclectic literatures, which throw insights on to the concepts and which will help in analysing the empirical data from the three sites of production.

Though globalisation has only become popular as a buzzword in the 1990s, the development of the EPZs in the 1960s and '70s represented an earlier strategy of globalisation in the regions of SE Asia and Latin America. EPZs are like islands of globalisation, with special facilities such as duty free imports, tax exemptions, infrastructural facilities and restrictions on labour unionisation. Restructuring and globalisation have meant a rise in EPZs as well as a gradual extension of the facilities available beyond the zones.

The literature on EPZs is linked to the literature on globalisation, feminisation and flexibility through the relationship between the global market and the majority presence of women. Whereas the literature on EPZs notes a preponderance of women in electronics and garment manufacturing, there is a debate on the feminisation of the labour force and the link with globalisation in the developed and the developing countries. One of the arguments of the feminisation and globalisation debate has been that the female work participation rate has increased compared to the male due to the opening up of the economy. The focus of the former literature on EPZs is on women as 'cheap', 'nimble fingered' and 'docile' labour, whereas the debates of the gendered labour and globalisation literature are on feminisation and flexibility.

I will argue that the gendered literature on world market factories does not pursue an in-depth analysis of the *processes* of gendering and the roles that language, discourse and subjectivity play in the gendering process. The macro level debate on feminisation and its relationship to flexibility is still unresolved. A micro level analysis on the processes of gendering and the relationship of feminisation and masculinisation to flexibility would shed some important insights into the dynamics of flexibility and feminisation/ masculinisation.

2.2 GENDERED EMPLOYMENT IN WORLD MARKET FACTORIES

In this section I review the literature on gendered patterns of employment in EPZs and EOIs. Most of this literature has concentrated on electronic and textile industries and has

noted a majority presence of women who are constructed by employers as a 'cheap' and 'docile' labour force. A deconstruction of the explanations for the large representation of women in the EPZs and EOIs in terms of their cheapness and lack of unionisation is attempted.

In the 1960s and '70s, multinationals were key agents in creating the new international division of labour, as some manufacturing operations were transferred from particular high cost developed countries to particular low cost developing countries (Frobel, Heinrichs and Kreye, 1980). Governments in these countries encouraged investment in export processing by giving tax holidays, subsidised credit, and export subsidies as well as freedom from import duties on raw materials, machinery and other items necessary to production (Safa, 1981: 418).

The clothing and electronic industries located in the 'developed' countries faced major obstacles to increasing relative surplus value because of economic and technological considerations, which made increased mechanisation difficult with existing technologies (Jenkins, 1991: 133). The tendency of firms in the developed countries to relocate labour intensive processes to the developing countries, in search of cheap labour, was also induced by the competition from garments, footwear and toy exports from Hong Kong, Taiwan and eventually from Japan (Lim, 1990: 103). In the case of the semiconductor industry, because of the advanced technology involved, it was not competition from Third World producers that induced relocation in the Third World, but rather competition between First World producers (Lim, 1990: 104). This was a period when post Fordian

technology made possible the breaking up of manufacturing processes into small independent processes. This, combined with developments in transport and communication, made the relocation of labour intensive processes in SE Asia and Latin America feasible.

2.2.1 Preponderance of Young, Unmarried Women

Much of the literature relating to EPZs in SE Asia and Latin America notes a majority presence of young, unmarried women in these zones, who are the preferred work force as they are seen by employers as available at low wages, submissive, naturally dextrous and disposable (Frobel et al, 1980; Grossman, 1980; Elson and Pearson 1981; Safa, 1981; Chapkis and Enloe, 1983; Fuentes and Ehrenreich, 1983; Women Working World-Wide 1991). Most of the feminist literature on the new international division of labour was inspired by Marxist-feminist thinking and argued that the oppression of women was functional to capitalism. These studies described the appalling conditions of women working in the factories in the zones. They drew attention to the poor working conditions, low wages, little or no fringe benefits, job insecurity and health hazards faced by women in the factories. Women's jobs were shown to be repetitive and boring, with little scope for upward mobility. Women were shown to be deterred from forming unions, and in some factories patriarchal values were extended and the concept of the 'family' used to achieve this end (Grossman, 1980: 32; Mitter, 1986: 61).

Lim (1990) has provided a powerful critique of this stream of literature, both in evidence and methodology. The workers in the export factories have been presented uniformly as young, unmarried and poor. However, she indicates a wide divergence in the age, marital status, educational level and background, by country and industry. She finds that among the Asian countries, the Philippines and Thailand have older women workers who are married. This is both due to poverty and a local tradition, which accords women a strong and independent role. In Latin America and the Caribbean, export industries include older and more ever-married women than in Asia, which is again due to local socio-economic factors (ibid: 106). Similarly Lim finds differences in the educational and economic backgrounds of workers across regions. The educational level and socio-economic background of the workers in the relatively poor countries is higher because of high unemployment and the desirability of a factory job. As regards industry differences, the electronics industry has relatively younger and better educated women workers (ibid: 106-107). Thus according to Lim:

> there is considerable diversity among women export factory workers in developing countries in terms of their age, marital status, education, and social origins. But this diversity is readily explained, being determined primarily by local labour market conditions in each country and by the varying needs of employers in different industries (ibid: 107-108).

Other studies have demonstrated that women's predominance in all export-oriented industries is an over generalisation. For example, Pyle (1990) notes that in the early 1970s Ireland's state policy attempted to limit the growth of the female share of manufacturing in export oriented enterprises by awarding financial incentives to those enterprises which proposed to employ fewer women. This policy was effective in achieving the target male proportion of employment of 75 percent in the early 1970s. In

the context of the export oriented garment industry in Delhi, Banerjee (1996: 4), notes 'Reports say that the fast expanding export oriented garment industry around Delhi also uses predominantly male labour.' It cannot thus be generalised that women are in the majority in all EOIs and detailed micro level studies could cast a different light in some cases. The preponderance of women in EOIs could also reverse as export oriented industrialisation proceeds, as suggested in the case of South Korea by Joekes (1986: 42), who notes that the reverse trend is accompanied by reskilling and mechanisation.

Women as 'cheap' labour

From the premise that female labour predominates in export oriented industry, researchers have sought to explain this by examining the reasons underlying multinational's recruitment policies. Women are held to be 'cheap' because they are not considered breadwinners even if they have to support large families (Chapkis and Enloe, 1983; Fuentes and Ehrenreich, 1983). Mies (1986) considers the universal ideology and practice of 'housewifization' as the process by which women are cheapened. Standing (1989: 1080) observes that young women in newly industrialised countries in Asia have been socially and economically oppressed for so long that they have low 'aspiration wages' and low 'efficiency wages'[1].

A rather different explanation given in the literature for the majority presence of women as a 'cheap' labour force in the export industries is the greater pressure faced by export industries to cut down the cost of production. According to Lim (1990: 108):

> Export industries are also usually labour intensive and must be competitive in the world market; they consequently can afford to pay less than tariff protected,

> monopolistic, often capital intensive and high profit (if inefficient) industries supplying the domestic market, which can always raise prices to cover higher wages.

Lim's argument can be contested - while it is true that most of the export industries in the developing countries are labour intensive, it is not necessarily true that the industries supplying the domestic market are monopolistic and earn high profit. Moreover, many benefits enjoyed by export industries, like duty free imports, are not available to the firms catering to the domestic market. Whatever the case is, Lim (1990: 108-9) goes further to claim that, although the wages earned by women workers in these industries are typically lower than the average wage for the manufacturing sector as a whole, they are higher than the wages in the alternative low skill female occupations, such as farm labour, domestic service, most informal sector and other service sector activities and small scale local industry.

Indeed Lim (1990: 114) has criticised the literature on women working in EPZs methodologically for the absence of a comparative standard by which to judge the conditions of women's work. She highlights the dearth of studies evaluating the circumstances of women in export factories in direct comparison with control groups of women and men working in other industries, or occupations, or who do not work at all. She has emphasised the need to evaluate women's employment in export factories in the local context of the economy and society of the country and not by making comparisons with the developed countries.

Women as nimble fingered

The preponderance of women in the electronics and textile industries has also been explained by the productivity differences between women and men. There have been few direct comparisons of female and male productivity but in a few documented cases where men have been employed, as in Malaysian electronics and Malawi textiles, the productivity of men was found to be lower than women (Elson and Pearson, 1981: 92). This would make a preference for female workers economically rational. Researchers have been particularly interested in the explanations cited for women's higher productivity, which rely on biological essentialism. Thus management attributes productivity differences to women's *natural* dexterity and nimble fingers.

Certain jobs, like assembling in electronics and sewing in garment industries, are looked upon as being appropriate for the nimble fingers of women and in this way the sector has become feminised. In their study of textile factories in Thailand, Porpora, Lim and Prommas (1989: 271) indicate that management often hired women because management uncritically assumed that such work is more properly done by women, due to the traditional association of women with the work. According to Elson and Pearson (1981: 93), the training received at home for acquiring manual dexterity by doing sewing is socially invisible, the skill it produces is attributed to nature and the jobs which make use of it are classified as 'unskilled' or 'semi skilled'. As noted in the study of SEEPZ in India by Women Working Worldwide (1991:154) 'As long as these jobs become socially established as women's jobs, they will remain for women with women's wages'.

Women as 'docile' labour

Much of the feminist literature on the new international division of labour (Elson and Pearson, 1981; Elson, 1983; Fuentes and Ehrenreich, 1983) looks at 'docility' and a related factor 'dispensability' as explanations for the preponderance of women in the EOIs. According to Elson (1983), women cannot be considered compliant in an absolute sense, since they do exhibit periodic militancy. However, she concedes that they may be more compliant than men. On the other hand Porpora, Lim and Prommas (1989: 271), in their study of Thailand, found women to be more militant and active in the trade union than men. If women are not inherently docile and less militant, it is arguably male dominated social structures, which regulate, control and discipline women more than men, that construct women as docile.

Although the argument that women are rendered less militant and relatively more docile than men is plausible in some situations, the point which I would like to raise is why is this quality of relative docility particularly important for EPZs? Most of the EPZs have restrictions on unionisation. In the wake of such measures, which repress militancy legally, why should women be preferred for their docility? In other words, the importance of docility would be more plausible in situations where there are greater chances of unionisation. The other side of the argument could be that given by Elson (1981: 96), that the government and companies in EPZs do not trust completely the personal docility of women workers and feel a need to reinforce it with a suspension of worker's rights.

Supply side explanations for the preponderance of women

It is difficult to clearly demarcate demand and supply side arguments as demand and supply factors may mutually reinforce each other. However, the above discussion gives primacy to the demand side in explaining the majority representation of women in EPZs and in EOIs. An alternative approach focuses on the supply side. Some of these studies emphasise the decision of rural families to send their daughters to work in the EPZs in the cities to supplement the family income (Safa 1981; Fuentes and Ehnreich, 1983). Others emphasise the choice of the women to decide to work in the factories (Porpora, Lim and Prommas, 1989; Lim 1990). However the 'choice' of women is shaped by cultural, ideological and material realities.

According to Lim (1990: 105) the EPZ literature holds that few *married* women work in the factories in the newly industrialised countries (NICs) because of cultural pressures, lack of childcare and the non-necessity of women's income for family survival. However, she points out that in Thailand and the Philippines the tradition of independent economic roles for women, low male income and unemployment, and the easy availability of childcare facilities, lead to many older married women entering the workforce.

Afshar and Agarwal (1989) discuss how the ideologies of seclusion, exclusion, and the social construction of femininity play an important role in shaping the production work of women in Asia, and how the changes in material realities could lead to shifts in ideological constructs. Phillips (1983: 102) notes that 'jobs are created as masculine and feminine, with their skill content continually redrawn to assert the dominance of men.'

However, the social construction of femininity and masculinity differs in different cultural contexts and is related to the gender division of labour in a society. There are some rare examples where the social construction of women places them in a more powerful position than men. One such case is indicated by Cho (1989: 160-61), in her study of Cheju Island in Korea. Here women were seen as independent and diligent and men as idle and lazy. These ideological constructs led women to be the customary divers and the main income earners of the family. A detailed discussion of the issues around feminisation and masculinisation of jobs will be taken up after a discussion of the Indian literature on EOIs.

2.2.2 The Case of India

The gendered literature on EOIs and on EPZs in India is very limited. Among the important studies are those by Banerjee (1983, 1991), Rao and Husain (1991), Kalpagam (1994) and Sharma and Sengupta (1984) on Santacruz Electronic Export Processing Zone (SEEPZ). The studies by Banerjee (1983, 1991) look at the position of women in five export industries of West Bengal - frozen fresh prawns, cotton garments, silk reeling, leather goods other than footwear, and electric fan manufacture. Banerjee (1991) has analysed the factors determining the demand for women's labour by particular industries and the relationship between these determinants and the export orientation of these industries. Questions about the rigidity of the sexual division of labour and discrimination are also examined. Rao and Husain's (1991) study covers different aspects of women's working conditions as well as their role and status in the family in the garment exports in

Delhi. They note a 42.44 percent representation of women in the thirty sample units. The study by Kalpagam (1994) focuses on the links between the formal and the informal sectors operating in the garment export industry in Madras city and the position of workers in the industry. She notes an overwhelming majority of females in the industry. Sharma and Sengupta (1984: 8) describe the scope of their study on electronics industry at SEEPZ as '.... analysing reasons for the preponderance of women workers and the special problems posed by the preponderance of female workers at SEEPZ'. They note a 90 percent representation of women in the zone.

Most of the studies on export oriented units note a gender division of labour. Thus in the study of the prawn industry by Banerjee (1983: 13), cleaning and grading of prawns is done by women, while men do loading, unloading and general cleaning work in the cleaning sheds. Banerjee's (1983: 31-32) study of the silk industry shows the coexistence of alternative technologies at different stages of processing. The cocoon rearing and silk reeling is done in the government units using modern techniques of production and requires greater capital investment. Here women collect the mulberry leaves and also do reeling, whereas men are the re-reelers. The private small units rely on old techniques of production and require very low levels of capital investment. It is men who do the reeling here but for all other operations relating to rearing of silk worms women as 'housewives' or 'cheap labour' are used. Banerjee's (1983) study of the leather industry shows a predominance of women. Here it is not the traditional skills of women that are being used, but the women are in the majority due to the very low wages, which would not have been acceptable to men (ibid: 46). Banerjee's (1983: 47-51) study of the fan industry

shows a decline in the role of women with the regularisation of wages in 1969-70 and subsequent upward revisions alongside mechanisation in the large factories. Some women are found in the small units in sanding operations because of the flexible workforce required.

The studies on the garment industry of West Bengal (Banerjee, 1983, 1991), Delhi (Rao and Husain, 1991) and Madras (Kalpagam, 1994) show a gender division of labour across the different regions. Though the tasks assigned to men and women are not uniform across the regions, tasks considered skilled, like cutting, are in all cases done by men, and women are on the assembly line in big firms. Banerjee's (1983) and Rao and Husain's (1991) studies note a higher wage level for men. However, Kalpagam (1994) notes that the wages of men in the informal sector in the garment industry are not necessarily higher than those of the women. There is a wide prevalence of subcontracting in the garment industry in Delhi, noted by Rao and Husain (1991: 151) and some subcontracting by units in the factory and the non-factory sector in Madras, noted by Kalpagam (1994: 158). However, Banerjee's study (1983, 1991) on the garment export units of West Bengal does not indicate any subcontracting.

In the case of Sharma and Sengupta's (1984) study on SEEPZ, 90 percent of the workforce is female and there is little scope for comparison between women and men. The arguments for a preponderance of female employees given by the employers - patience, finger dexterity, docility, and low wages - closely resemble those given in the

case of SE Asian countries (ibid: 23-24). Another commonality with the SE Asian case is the preference given to young unmarried women.

Some Indian studies mention docility and the ease of controlling women as important reasons for hiring women. In Banerjee's (1983: 16) study of the prawn industry, Keralite migrant women were hired 'to avoid trouble'. Nonetheless, I would argue, as noted in an earlier discussion, that docility is not a 'natural' trait of women, but acquired due to familial repression. Rao and Husain (1991: 159) also note that women are used to lower wages and combat worker militancy. In one of the examples, women and men are dismissed for union activity in a company, but then women are taken back on their providing a written undertaking that they will not participate in union activity in the future. This example shows that women are not inherently docile and that the companies take measures to ensure their docility. Sharma and Sengupta's (1984) argument that women are morally less prone to unionism is questionable, for, as is pointed out elsewhere in the report, 'She was terminated from the job for her allegedly trying to organise women workers against the "interest" of the employer' (ibid: 144). The evidence from the interviews with the workers corroborates the idea that low unionisation of workers was due to fear of losing their jobs (ibid: 159). Kalpagam's (1994: 177-185) study of the garment export industry in Madras reveals a significant representation of women in trade unions, which questions the generalised assumption of women as docile. However, she adds in a later section that despite the participation of women in union activities in 1981, employers perceive women to be docile and this perception is an important factor in the continued recruitment of women (Kalpagam, 1994: 190).

From my review of Indian studies on gendered employment in export units, I note a clear gender division of labour in most of the studies where men are constructed as skilled and are better paid and women are constructed as 'cheap' and unskilled. The gender division of labour in some cases is based on the traditional domestic roles of women. However, except for Banerjee's (1983, 1991) studies, there is little detailing of the *processes* of feminisation and masculinisation of production. Similarly from the review of the literature on export manufacturing in S.E. Asia and Latin America, most studies note a wide prevalence of women and a negligible presence of men in many cases, but leave little scope for a detailed gendered analysis on the processes of constructing jobs as feminised and masculinised. Though one does find the beginning of the use of the idea of the gendered labour process in the literature in its analysis of the construction of women as naturally nimble fingered, there is a need to closely analyse the processes of gendering.

Much of the literature on EPZs is ideologically dominated by socialist feminists and there is a need to incorporate insights of postmodern feminist thinkers. Postmodern/postcolonial feminist thinkers (Ong, 1988; Mohanty,1991) have criticised the meta-narratives of liberal and Marxist feminist writers for their construction of Third World women as uniformly subjugated by patriarchy and lacking any agency. In so doing, Third World women are constructed as the 'other' to their western feminist 'sisters' (Ong, 1988). Ong (1988) has criticised much of the literature on the new international division of labour for reducing the practical and theoretical significance of women to their status as 'a source of cheap labour' and giving little importance to the

social meanings the changes have for women. This criticism does not hold for all the literature on EPZs reviewed above, for one does find cases of women showing overt and covert forms of resistance. However, there is a need to focus on the experiential subjectivities of women in their capacities as workers, and homemakers.

Parpart (1993: 454), while commending socialist feminist sensitivity to gender and class, has criticised it for paying lip service to ideology in a materialist analysis and for its inability to provide the tools for investigating the construction of meaning and its dissemination through language. She highlights a need to enrich socialist feminist analysis through the postmodern conceptual tools of discourse, knowledge/power relations and difference.

I seek to fill this important gap in the gendered literature on world market factories by closely examining the processes of gendering and the construction of jobs as masculinised and feminised in the jewellery sector in India. In this context I examine the role of discourses, which feed into social and material practices and are shaped by them. The investment of different actors in these discourses helps to shape their subjective identities and these subjective identities in turn shape their investments. The question that I ask in this context is:

1. What are the gendered processes that construct the feminisation and masculinisation of jewellery production in the three sites - NEPZ, Delhi and Medinipur?

I next take up a discussion of some key concepts - the labour process, discourse, practice, agency, identity and subjectivity - which I will be using to answer question one.

2.2.3 The Conceptual Framework

Labour process

Labour process theory, as developed by Braverman (1974), focuses on the development of Tayloristic methods of scientific management to control the workers, through a division of labour and 'deskilling' whereby workers lose control over their craft skills. Homogenisation and feminisation of labour accompany the 'deskilling' of the workforce. Feminists criticise the labour process theory for its neglect of the agency of male workers in opposing radical change in the gender division of labour and resisting women substituting for men (Liff, 1986). A useful insight is offered by Cockburn's (1981, 1983) study of the history of the printing industry. The study shows the manner in which skilled male compositors worked towards maintaining control over the workplace by eliminating the possibility of any *unskilled* men and women being present. According to Cockburn:

> Physical and moral factors (girls were not strong enough, lead was harmful for pregnancy, the social environment might be corrupting) were deployed ideologically in such a way that few girls would see themselves as suitable candidates for apprenticeship. A second line of defence against an influx of women was of course the same socio-political controls used to keep large numbers of boys of the unskilled working class from flooding the trade. (Cockburn, 1981: 46)

When the compositors were faced with the challenge of technology, they fought it to retain their power not just as skilled craftsmen but also as men (Cockburn, 1981: 49).

Cockburn's work has clearly shown that work and workplace relations reproduce the unequal relations of gender, which cannot be subsumed under 'the family'.

Cockburn (1986) adds an important dimension to the gendered labour process studies. She finds the relationship of each gender to technology to be an important factor in categorising work into men's work and women's work. Whereas women are the manual operators of the machines, men are normally involved in setting, designing and maintenance of the machines. According to Jenson (1989: 149-151) there are three reasons that women and men have different relationships to machinery. The first is that the men who construct the machinery make assumptions of body strength and size, such that only men can manipulate the machine (Cockburn, 1981). Secondly, when assigning tasks managers use dichotomies such as heavy/light, with the former jobs being assigned to men and the latter to women. Such gender divisions of labour rigidify overtime. Thirdly, women's own identity often contains a notion of femininity which in most societies excludes the notion of familiarity with technical skill.

In my study I will use a concept of the labour process which goes beyond the Marxian approach and incorporates the agency of both men and women in structuring the labour market. My study incorporates insights of postmodernism and examines the role of discourse, practice and subjectivities in the gendering process.

Discourse

According to Andermahr, Lovell and Wolkowitz (1997: 53) discourse is an utterance or discrete piece of language. The definition in the Penguin Dictionary of Sociology (1984: 71) on discourse as a domain of language use that is unified by common assumption is particularly useful. This is elaborated later in the statement that within a discourse there is literally something that cannot be said or thought. That is, a discourse as a ready-made way of thinking can rule out alternative ways of thinking and hence preserve a particular distribution of power. Canning's (1994) analysis of women's history is useful in indicating the material and ideological consequences of discourses that become hegemonic, and those that are contested and transformed.

Practice

Andermahr, Lovell and Wolkowitz (1997: 174) indicate that practice is more often used to refer to theoretically and/or politically informed activity. They indicate that in feminism the term is sometimes used to distinguish activity from its social construction or institutionalised forms. According to Hollway (1998: 227) '....every practice is a production [what we have called its "positivity"].' She emphasises that recurrent day-to-day practices and the meanings through which they acquire their effectivity may contribute to the maintenance of gender difference or to its modification. In my study I refer to gendered social and material practices, which are constituted by discourse and feed back into discourse.

Agency

Another concept that I use in my analytical framework and that calls for explanation is that of agency. The concept of women's agency is useful in questioning the 'victim approach' to women. Postmodern analysis is especially useful in emphasising the agency of the subject and in its recognition of manifold structures of power. Agency can be traced in the experiences of people. According to Sewell (1989: 19) experience is a process that is embedded in the 'cultural understandings and linguistic capacities' of historical subjects. Canning (1994: 377) uses the concept of agency to analyse how discourse changes, how subjects contest power in its discursive form and how their desires and discontents transform discursive systems. In the context of their investment in different discourses that gender the labour market I look at the agency of both men and women.

Identity and Subjectivity

A concept related to agency is identity. Andermahr, Lovell and Wolkowitz (1997: 124-125) distinguish between identity as socially constructed and identity as a social process. They argue that identity may be best considered alongside its binary partner 'difference' and that while the differences across which people might construct identities are unlimited, a few recur across all cultures including differentiation by sex. Work plays an important role in shaping male identity. Studies such as Ford (1985) and Ingham (1984) indicate the centrality of paid work in the lives of men. Masculine identity is socially constructed through paid work, which is embedded in an occupation and often within an organisation (Cheng, 1996: xiv). Cockburn (1983: 133) has studied the differences

between skilled and unskilled workers and the ways in which work is identified with masculinity. Cockburn operates with a theory of identity in which the investment in macho masculinity is a way of compensating for the indignities of commodified and controlled manual labour. Knight (1990) has criticised Cockburn's work for conflating subjectivity with gender and class identity. He emphasises that there is much more to masculine identity and subjectivity than workplace compensation. His study is useful in highlighting the interrelationship of power and subjectivity.

According to Foucault (1979) subjectivity is not autonomous and independent from structural forces. Rather, subjectivity is itself constituted by 'disciplinary practices' and 'relations of power'. Henriques et al (1998) make a valuable contribution through use of Lacanian psychoanalysis and Foucauldian theories of disciplinary power and resistance, to reconstruct a subject which is multiple, fragmentary and discontinuous. They focus on the ways in which individuals "invest" in prevailing discourses and discursive practices to reproduce their gendered subjectivities.

According to Collinson (1992: 29-30) human subjectivity is always characterised by a dual experience of self as both separate from, yet also related to, the natural and social world. The dual experience of self as both subject and object creates an ambiguity at the very core of subjectivity, which is irreducible, but also often contradictory. Collinson elaborates further that such ambiguities about the self result in feelings of insecurity, and individuals invest in discursive practices that emphasise self as an active subject totally separate from others, or exclusively a passive object completely dependent on others. In

his study of the shopfloor culture of Slavs, he notes a wide prevalence of security seeking subjectivities like indifference, domination and subordination in which individuals at various hierarchical levels invest. He examines the routinely privatised, privileged and pervasive cultural practices on the shopfloor like resistance, compliance and consent of the manual workers that were saturated with masculine subjectivities.

Game and Pringle (1983: 28-29) shed useful light on the polarities at work like skilled/unskilled, heavy/light, dangerous/less dangerous, dirty/clean, interesting/boring and mobile/immobile, with the former being associated with men and the latter with women. In this context Morgan (1992: 82) notes two important aspects of skill and craftsmanship as they apply to themes of masculinity. One is 'being good with one's hands', and deriving satisfaction from a job well done and the other is skill as social construct, socially controlled and monopolised so as to exclude women and other men. Thus, Morgan argues that skill may have male gendered connotations, and also masculinity will enter into the social and collective processes as a means of monopolising the skills. Seidler's (1991: 111) conceptualisation of masculine identity as requiring self-denial adds a new dimension to the literature.

In the context of the studies relating to the subjective experiences of paid work for women, I find the studies of Ong (1987) and Kondo (1990) particularly insightful. Kondo's study of part-time women workers in Japan indicates multilayered discourses, which construct the gendered work identities of women. Kondo (ibid: 299) concludes:

> words like "resistance" and "accommodation" are inadequate, for apparent resistance is constantly mitigated by collusion, and accommodation may have

> unexpectedly subversive effects. For it is precisely by enacting their conventional gendered identities that women also refuse to accept their structural marginality and make themselves central figures at the workplace.

Ong's (1987) study of Malaysian women workers in a free trade zone shows a change in the subjectivity of women, which comes with their ability to contribute to the family budget. This was reflected in changes in their dress and makeup, which became westernised, and in them asserting themselves in deciding to choose their spouse and being influenced by consumerism. Their resistance on the shopfloor in the nature of spirit possession, through using a cultural resource, was more overt than is the case of the Japanese women workers in Kondo's study.

I use the relationship of discourse, practices and subjectivities of workers to analyse the gendering of the labour market in the three sites of production - NEPZ, Delhi and Medinipur. The gendering of the labour markets is then tied to the debates on feminisation and flexibility. Next I will look at the literature on how the gendering of jobs relates to flexibility of labour in the context of globalised production.

2.3 GLOBALISATION, FEMINISATION AND FLEXIBILITY

The 1980s witnessed a wide scale restructuring in the world economy, both developed and developing, which has had significant implications on the labour market. Empirical evidence (Beneria, 1992; Dennis, 1992; Safa and Antrobus, 1992) and theoretical explorations (Bakker, 1994; Brodie, 1994; Elson, 1994; Grown, 1994) indicate the adverse implications of restructuring the economy for women. Cuts in government

subsidies and welfare expenditures increase the burdens of the reproductive economy, burdens largely shouldered by women. The declining role of the public sector and its rationalisation has a greater adverse effect on women than on men because women are better represented in this sector. There is a central macroeconomic debate and controversy around globalisation and feminisation of the labour force that is the main focus of this section.

Standing (1989) uses ILO statistics for various years to show an absolute and relative growth in the use of female labour around the world in the 1980s. Standing ascribes the increase in the activity rates of women in comparison to men to flexibilisation of the labour market and a pursuance of export led industrialisation. He reproduces the ILO statistics on the percentage share of women in non agricultural employment and in manufacturing between 1975 and 1987 for African, Latin American, Asian and Pacific countries. These data show that the female share of non agricultural employment has grown in the countries that adopted SAPs and embarked upon export oriented industrialisation.

According to Standing (ibid: 1078), the global strategy of trade liberalisation leads to increased emphasis on cost competitiveness. He observes that a global pursuit of flexible low cost labour has encouraged industrial enterprise everywhere to reduce their fixed wage labour force, to make payment systems more flexible and use more contract workers, temporary labour and homeworkers. The informalisation of the labour market, according to Standing, would explain the absolute and relative growth in the use of

female labour around the world and a "feminisation" of many jobs and activities carried out by men. In the context of his analysis on feminisation, Standing (1989: 1080) concludes that women are being substituted for men and many forms of work are being converted into jobs traditionally done by women. Standing has analysed flexibilisation as associated with feminisation and resulting in a substitution of women for men and a decline in the sexual division of labour.

The interpretation of Standing is questionable, however, in the context of evidence of a feminisation 'U' in many studies (Pampel and Tanaka, 1986; Tilly and Scott, 1987; Goldin, 1994). Cagatay and Ozler (1995: 1884) sum up the evidence for the phenomenon of the feminisation U. The feminisation U is associated with an initial decline in female work participation rates in agriculture as men's better access to new technology, and the growing productivity differences, cause women to withdraw from the agricultural sector. Through processes of urbanisation and industrialisation, female dominated home based production is replaced by factory production, which is male dominated. These factors account for the downward portion of the feminisation U (Boserup, 1970, quoted in Cagatay and Ozler). With further development the women's work participation rate is likely to rise, due to industrialisation, more education for women, commodification of domestic labour and falling fertility rates (Oppenheimer, 1970, Boserup, 1990, quoted in Cagatay and Ozler).

The question that this raises is whether the observed increases in the relative female work participation rates in the 1980s are evidence of the upward portion of the feminisation U

or are due to a shift in the feminisation U with the introduction of SAPs? Cagatay and Ozler (1995) have estimated the impact of SAPs by controlling for the feminisation U, in 96 countries, using the World Bank data for the years 1985 and 1990. Cagatay and Ozler's evidence supports the hypothesis of a shift in the feminisation U, with the introduction of SAPs. They arrive at the conclusion that 'controlling for the feminisation U, SAPs have led to an increase in feminisation via worsening income distribution and increased openness' (ibid: 1892).

Elson (1996) has added a useful dimension to the flexibility debate. She identifies 'flexibility' as referring to three different dimensions of the economic system - the organisational structure of firms, the operation of the labour market and the pattern of production, which result in functional flexibility, numerical flexibility or financial flexibility. According to Elson (1996):

> Functional flexibility refers to flexibility across job boundaries, so those workers are called upon to undertake a different range of tasks and skills that cut across former demarcations. Numerical flexibility refers to flexibility in hours of work, both in total and in shift pattern, and in number of workers. Financial flexibility refers to flexibility in the costs of employing labour, particularly in the fixed costs of employing workers (ibid: 36-37).

The three modes of flexibility can be related to each other, particularly the concepts of numerical and financial flexibility. Financial flexibility achieved through subcontracting can also mean greater numerical flexibility, and increases in numerical flexibility through casualisation and greater dispensability of the workforce can mean greater financial flexibility. Walby (1989: 137) has brought out the inverse relationship between numerical

and functional flexibility, for functionally flexible workers are not expected to bear the brunt of numerical flexibility, which results in increasing segregation.

Elson's (1996) analysis provides useful insight on the relationship of flexibility and feminisation. Elson (1996: 37) notes that the analysis of flexibility in Standing's approach refers to labour market flexibility and functional flexibility. She has broadly two criticisms to Standing's approach to flexibility and feminisation. First, on the meaning of feminisation as substitution of men for women, and second on the nature of the association of feminisation with flexibility. According to Elson (ibid: 38) a rise in women's share of employment does not by itself indicate the feminisation of jobs traditionally done by men, for it is compatible with the disappearance of the jobs traditionally done by men and an expansion of the jobs traditionally done by women. She cites the study of seven developed countries in Jenson, Hagen and Reddy (1988), that shows feminisation of the labour force occurring along with a segregated labour market.

Elson's contention of the rigidity of sexual division of labour is substantiated in Cagatay and Berik's (1990) earlier study on Turkey which shows little impact of structural adjustment and export-oriented industrialisation on the feminisation of production in large-scale manufacturing. Cagatay and Berik use pooled regression analysis on the manufacturing subsector, for the years 1966 and 1982. From their analysis they arrive at the following conclusion:

> Our investigation of the transition from import-substituting to export led industrialisation in Turkey shows that successful export orientation of the economy has been achieved without a relative growth of women's employment in large scale manufacturing enterprises. The lack of a feminisation of employment

> in large scale manufacturing in the 1980s could be due to the resistance of gender typing of industries in the context of labour repression which reduced the labour cost "advantage" of women workers vis a vis men (Cagatay and Berik, 1990: 129).

Thus, Standing's interpretation that the sexual division of labour is diminishing with increased labour participation of women globally, and that women are substituting for men, cannot be accepted at face value.

Second Elson (1996) argues that a rise in flexibility may be accompanied with a decline in the female share of employment. In this context she cites studies in developed countries (Walsh, 1987; Goldstein, 1989) and in developing countries (Pearson, 1991), which show a decline in the share of employment of women in electronics and textiles, industries traditionally dominated by women, with 'flexibility' in scope of jobs. She also cites the data from the ILO Yearbook of Statistics 1991 as further evidence of a decline in the female share of employment in the textile industry and in the electrical machinery industry in the 1980s, for many countries.[2] On the basis of the evidence, she concludes:

> 'Flexibilisation' does not necessarily lead to direct substitution of women for men in types of work traditionally done by men; nor does it necessarily lead to rising female share of paid employment in manufacturing industries. The gender division of labour, which tends to confine women to relatively subordinate and inferior positions in the organisation of monetised production, is not overridden by 'flexibility'. Rather it structures the form that flexibility takes (Elson, 1996: 40).

In this context Elson cites the evidence from the study of Lima in Peru, by Scott (1991) which shows the gender segmentation of jobs in both the 'formal' and the 'informal' sector. Women in both the sectors have jobs associated with characteristics of 'flexible' labour and men with 'regular' labour.

2.3.1 The Feminisation Debate in India

Sudha Deshpande and L.K. Deshpande (1992) have contributed to the debates around globalisation and feminisation in India. India adopted a package of stabilisation and SAPs in June 1991, with the acceptance of an IMF loan and its conditionalities. However, the process of liberalisation has been underway since the 1980s. Deshpandes (1992) and Deshpande (1993) have observed a process of feminisation of the workforce in India, on the basis of the official data at the national level and in the city of Bombay. Deshpandes (1992) observes that the female labour force participation rate of all workers in urban India has increased from 8.31% to 9.74% between the 1981 and the 1991 Census, while that of males has declined from 49.06% to 48.95%. However, Shah et al (1994: 2248) observe that the 'Provisional Census categorically states that higher female work participation rates would be due to the fact that more women were netted. This could have been the result of conscientising and training Census officials and field workers'. Moreover, the National Sample Survey Organisation data for 1983 and 1987-88 show a decline in the male work participation rate in urban India from 51.2% to 50.6% and a negligible rise in the female work participation rate from 15.1% to 15.2%. Shah and others have also given evidence of micro level studies on the textile mill sector in Ahmedabad and Mumbai (Savara, 1982; Jhabvala, 1985) which contradict the feminisation hypothesis and show a decline in the employment of women over the past few decades, due to automation. Micro level studies on women's employment in the mining sector (Sen, 1990) and in chemical and engineering sectors (Gothosker, 1992) also witness a process of defeminisation.

From the above evidence one can conclude that while there is some preliminary evidence of an increase in the work participation rate of females in the aggregate Census statistics of 1991 compared with 1981 in India, the evidence is not substantiated by disaggregated statistics at the industry level, nor do individual studies on the female work participation rate at the micro level corroborate the thesis of feminisation. Moreover, the rise in the female work participation rate in relation to a decline in the male work participation rate is not perceptible at the level of absolute numbers. Thus, the evidence of feminisation of the work force in India is tentative and not conclusive.

As regards the debate on the relationship of globalisation, flexibilisation and feminisation in the context of India, Banerjee (1996: 5) rejects the relationship and necessary connection of globalisation, flexibilisation and feminisation on two grounds. First she argues that capitalists have always tried to lower the costs and optimise efficiency even prior to globalisation. As evidence she cites the case of Indian owned textile mills of Ahmedabad and Mumbai where owners subcontracted weaving work to powerloom industries in the 1960s. Second she argues that flexibility is compatible with a masculinised labour force. Banerjee (1996: 4) notes that if the entire edifice of labour legislation is dismantled in a given country, then 'this flexibility need not necessarily lead to feminisation, because just as females cannot get benefits like those for maternity, male workers also cannot demand better work contracts on ground of their united strength'. She further adds that in such a situation the employers will choose the workers whom they think can do the work efficiently and that choice has been for men in many instances in India. However, it is important to also incorporate not just the 'choice' of employers

but also the supply of labour which itself could be gendered. The supply of labour is gendered in that men and women make gendered choices of jobs and in that there are special constraints faced by women in the nature of discourses and practices of exclusion.

From the debate on feminisation it emerges that the association of flexibilisation with feminisation and a decline in the sexual division of labour is questionable and may differ from one country to the other. It is especially problematic in the context of a labour surplus country like India, where flexible labour conditions are widely imposed on men. The macro level analysis and debates on feminisation, globalisation and flexibility focus on the demand side of the labour market and pay little attention to the supply side. There is need for a micro level analysis of the processes of exclusion or incorporation of women into different sectors of the economy for a given country or in different locations in an industry. I will examine the relationship of flexibility to the gendering of jobs in the gems and jewellery industry in three different sites of production. I will draw on the labour process theory to focus on the processes of gendering and its relationship to flexibility. The question I examine in this context is:

2. How does feminisation and masculinisation in the different sites and forms of gems and jewellery production relate to flexibility?

I next take up a more detailed analysis of the concept of flexibility, in the context of the issues around the control and autonomy of the workers. I then discuss in more detail the concept of feminisation and the manner in which I use it in my study.

2.3.2 The Conceptual Framework

Flexibility

I have examined in detail the feminisation and flexibility debate. Flexibility like globalisation has become a popular buzzword in the 1990s. However, one does find its usage in earlier literature as well. Mitter (1986: 106-107) notes a rise in small firms and self employed in the US and the UK as early as the 1970s, due to decentralising production through massive subcontracting known as 'flexible specialisation' in the U.S. and 'neo-fordism' in France.

The flexibility debate as it emerged in the developed countries has been concerned with changing rigidities in labour and employment patterns in the 1980s. In this context managements have been concerned with organisational flexibility, job flexibility, and multi skilling (Wood, 1989). The present concern with flexibility represents a break from the past domination of Taylorist and Fordist methods, which are linked to mass production, and is termed by Piore and Sabel (1984) as flexible specialisation. Flexible specialisation thus represents a break from the labour process theory of Braverman, which postulates that there would be no end to Taylorism without an end to capitalism. However, between the two extremes of labour process theory and Piore and Sabel's flexible specialisation theory lies the possibility of transformation within Fordism and Taylorism (Wood, 1989: 3).

Atkinson's (1986) model, with a core workforce that is multiskilled and a peripheral workforce that is disposable with fewer employment rights, raises the problem of demarcating the trend of flexibility. Pollert (1987: 33) has asked if the core-periphery divide is a continuation of labour market segmentation by gender, race and age, and of other management strategies such as lowering labour costs and rationalisation. So the key question is the extent to which firms are moving towards the flexible firm model. Wood (1989: 7), on the basis of Atkinson's study of eighty British manufacturing firms, concludes that while the desire to increase flexibility has been an important aspect of firms' evolving labour strategies in the 1980s, they have not necessarily embraced the core-periphery model or developed any coherent strategy for increasing flexibility. The important point to recognise is that even in the context of developed countries, elements of 'flexible specialisation' and Fordism may be present together in a firm or an industry, and there may not be a complete break between one organisational form and the other. As Wood (1989) has indicated:

> Control and flexibility are not two ends of a single unidimensional continuum. There was considerable flexibility in Fordism - indeed central to Taylorism was the idea of workers being disposable and hence the association of routinization and low training times with numerical flexibility (ibid: 28-29).

Piore and Sabel (1984) consider flexible specialisation as a move from the special purpose machinery of mass production operated by semi-skilled and skilled work forces, to general purpose tools used by skilled workforces with knowledge in order to make quick adjustments to changing markets and more differentiated tastes. They postulate that under a flexible regime the skilled workers will have greater control over their lives and their working conditions as compared to mass production.

Morris and Lowder's (1992) work is useful in highlighting the specificity of the flexible production systems in the case of a developing country. Morris and Lowder (1992: 192) find that the concept of flexibility in a Third World context is particularly applicable to informal/illegal firms which may change their products from day to day according to demand, have a flexible pool of inflexible labour, and make minimum investments in any infrastructure or machinery. In the context of their study of leather tanneries in the shoe sector in Leon, Mexico, Morris and Lowder (ibid: 194) find that the high technology 'flexible specialisation' model of Piore and Sabel does not apply, but it has parallels with the Southern European system of flexibility. Their study shows that it is not the crisis of capital and labour which engenders flexible specialisation, but that flexibility is built into the history of the area through the development of small firms and special skills. Amin (1989) defines three kinds of Italian small firm. First the artisanal firm which has not moved beyond a dependence on individual craft skill, found in the south. Second, subcontracting small firms, which result from the putting out of production by the big companies, which are popular in the north. Finally independent small firms, which cater to a competitive market with fluctuating demand, and have a flexible production system.

Whose flexibility?

Most macroeconomic debates focus on flexibility in the context of the employer.

Elson (1996) sees a potential for flexibility to serve the interests of the workers, particularly women workers, by allowing them to fit their housework and child care responsibilities in with their paid employment, in the short run. In the long run, she sees the desirability of men participating equally in the reproductive economy, which again

would call for flexible hours of work. Elson (1996: 42) argues that the main concern with regard to flexibility should be the erosion of worker's rights and organising against the erosion of those rights, rather than the disintegration of a male norm of regular employment.

Huws, Hurstfield and Holtmaat (1989) have raised the issue of control, to see whether flexibility is serving the interests of the workers or of the employer. They note that flexibility determined by the needs of the employer, which requires varying amounts of work at unpredictable times and brings fluctuating rewards, far from increasing the choice of an individual worker actually decreases it by generating a state of perpetual insecurity and making it impossible to plan ahead (ibid: 12). Allen and Wolkowitz (1987) in their study of homeworkers also show that homeworking provides a flexible source of labour to the employer but does not provide any reciprocal advantage to the homeworkers. The homeworkers are faced with uncertainty and very often work for more than one supplier; they have little leisure and bear the overhead costs.

Dickens (1992) categorises part time work, homeworking and temporary work as atypical forms of work. She finds an over representation of women in all forms of atypical work in Britain (ibid: 8-13). Her analysis shows that atypical workers are disadvantaged in their interactions with employment practices, with trade unions and social regulation through collective bargaining, and labour law and social security (ibid: 14). She argues that opting for atypical work has to be seen as constrained choice and that the flexible

forms of working for the employer probably match least with women's domestic commitments (ibid: 37-38). According to Dickens (1992):

> The extension of rights to all workers and better childcare provision would help facilitate a voluntary choice as to employment form, rather than a severely constrained one; a choice concerned with flexibility *for* women rather than simply *by* women (ibid: 38, emphasis in original).

Thus there is no consensus on the desirability of flexibility for the workers. Elson's postulation of the desirability of flexibility for women even in the short run is questionable in the context of the evidence to the contrary by Huws et al (1989), Allen and Wolkowitz (1987) and Dickens (1992).

The case of India

In discussing the issues of flexibility in the context of India, it has to be recognised that flexible labour market conditions have existed for a long time, as labour market regulations have not been extended to vast number of workers. According to Mathur (1992), the employment security provisions did not cover more than twelve percent of main workers in the 1981 Census.

Banerjee (1996: 8) indicates that the argument of Piore and Sabel relating flexiblity to greater control over the labour process and promoting initiative in the artisans is non applicable in the context of India. Banerjee notes that the policies of flexibilisation are being used in India not so much to give scope for the initiative of skilled artisans, but to reduce labour cost. However, Banerjee has little evidence to support her assertion. There

is a dearth of studies on India which could shed light on the issue of flexibility in the context of the experiences of workers. I seek to fill this important gap.

In the context of India, Chhachhi et al (1996) examine the trends in relation to labour market flexibility, feminisation and casualisation of the workforce for five industries - electronics in Delhi, and pharmaceuticals, plastics, soaps and detergents and gems and jewellery in Mumbai. Their study indicates a high incidence of non-permanent workers. Only 28% of the workers had a written contract (ibid: 6). They use the primary data collected through interviews with six hundred and ten women and divide workers into labour status categories indicating employment, income and employment security. Their study shows that unionisation and years of experience had a significant role in ensuring employment security. The study shows an increase in job rotation across gender boundaries over time. Although based on primary data, the analysis is largely quantitative in nature and sheds little light on the experience of flexibility as expressed in the voices of the workers.

In the context of the debates on flexibility, labour process control and how workers experience flexibility in developed countries, and the gap in the literature in India, my study will focus on the experiences of flexibility of different actors - entrepreneurs, contractors, subcontractors, workers - both male and female - in different sites and types of jewellery production. I will analyse the issues of autonomy and control raised in the context of flexibility.

Feminisation

So far I have elaborated two different meanings of feminisation, that is, of a rising workforce participation of women in comparison to men at the aggregate level, for some countries. Standing (1989) postulates feminisation as a substitution of women for men while Elson (1996) considers feminisation as due to a rise in the jobs traditionally done by women as compared to jobs traditionally done by men. In this section I discuss the concept of feminisation in depth and the manner in which I use it in my study. There are in fact at least four different meanings of feminisation in the literature, as has been noted by Chhachhi and Pittin (1996: 7-8). They are:

- Increase in the female participation rate relative to men.
- The substitution of men by women who take over jobs traditionally handled by men.
- The increase in women's involvement in 'invisible' work, i.e. family labour and homeworking.
- The changing character of industrial work on the basis of new technology and managerial strategies whereby work is decentralised, low paid, irregular, with part time or temporary labour contracts, that is increasingly like women's work (but which is not necessarily done by women).

All the above dimensions of feminisation consider the intertemporal changes in the workforce and in the character of industrial work. However, I intend to examine not the changes in the workforce or work practices over a period of time but differences in the composition of the workforce and organisation of the labour process in different sites and forms of production at one point in time. Thus, I will examine the synchronic dynamics

of the construction of different production processes and sites as feminised or masculinised, their relationship to flexibility and also the construction of masculine and feminine identities. At the same time, I make reference to anecdotal evidence regarding change in the workplace and, through a comparison of a handmade jewellery production site with a machinemade one, I am able to speculate as to the difference that new technology might make.

As I do not have systematic data on changes in the workforce or work practices over a period of time, the first meaning of feminisation as an increase in the participation rate of women relative to men is not dealt with in my research. Instead I examine the male/female employment ratios in different sites and forms of production of jewellery. The concept of participation rate, as the number of males or females employed as a proportion of those seeking employment, is problematic in the context of my study. This is so because many of the women working in handmade jewellery, who are unpaid family workers, do not conceptualise it as work. Moreover women are not 'free' to seek employment like men, but are constrained by the discourse and practice of seclusion. Thus the focus of the study is on the processes of incorporation of women in different capacities as unpaid family workers, homeworkers or as full time paid workers, and not just on the numbers of women and men participating in the workforce.

The second meaning of feminisation, as substitution of women for men, can be tied up to the labour process theory, which hypothesises that technological changes lead to 'homogenisation' and 'feminisation'. Bradley (1986: 54) in her study of the hosiery

industry in Britain identifies three trends in the development of the labour process. The first is the long-term trend towards 'degradation' or 'real subsumption' of labour. According to Wright (1978) this involves reducing labour to its most basic form, easily manipulated and easily replaced as a part of the drive towards increased productivity and profits. The second is resegmentation, whereby the powerful groups succeed in hanging on to positions of privilege by retaining old skills or monopolising new ones. Degradation and resegmentation are labelled as 'global' tendencies by Bradley. A third category of strategies Bradley labels as local strategies, which could be restrictive and 'pacificatory'. Restrictive strategies are strategies that restrict the autonomy and space of the worker, whereas strategies that yield space and autonomy to the workers to gain their cooperation are termed 'pacificatory' (ibid: 54-55).

Bradley argues that processes of degradation and resegmentation have been intimately linked with shifts in the sexual division of labour and that technological change has been closely associated with a policy of introducing female labour. She argues that the notion of female substitution might be inappropriate to use in this context, for there is a transformation of jobs (ibid: 55).

Liff (1986) offers a useful insight through her critique of the deterministic account of labour process theory of technical change in relation to the employment of women, which fails to explain the persistence of occupational sex typing in Britain. She indicates that the reason for this failure is that the theory does not take account of the ability of male workers to oppose such changes, fails to differentiate between the generalised notion of

capital's interest and the interest and actions of individual capitals and is unable to account for the gendering of jobs in terms of the nature of the work and the beliefs about the different characteristics of men and women (ibid: 88-90).

Braverman's assertion on skill, as elaborated by Zimbalist (1979: xv), is that 'There is a long-run tendency through fragmentation, rationalisation and mechanisation for workers and their jobs to become deskilled, both in an absolute sense (they lose craft and traditional abilities) and in a relative one (scientific knowledge progressively accumulates in the production process)'. However, as noted by D'Mello (1992: M67), in the case of India most sophisticated capital goods producers are affiliates of western TNCs or have licensing arrangements with them. So the core component of conception is done at the parent corporation's establishment at the centre, and execution is at the periphery. Also technology is leased to the Third World only after it reaches its 'mature' form, that is when it has already been subjected to rationalisation, job fragmentation and mechanisation.

The third concept of feminisation as an increase in women's involvement in 'invisible' work, that is family labour and homeworking, will imply financial flexibility for the husband and for the entrepreneurs. The fourth concept of feminisation as decentralised, low paid, irregular work with part time or temporary labour contracts comes close to the definition of numerical flexibility. In the context of my study, I examine the dynamics of the construction of 'homeworkers' and the manner in which homeworking is gendered. Allen and Wolkowitz (1987) define homeworking as *waged* labour incorporated into

capitalist relations of production. However, as indicated by Prugl and Boris (1996), the distinction between home based wage earners and the self-employed is less pronounced in the postindustrial economies. The ILO (1995: 5) defines homework as

> the production of goods or the provision of services for an employer or contractor under an arrangement where the work is carried out at a place of worker's own choosing, often the worker's own home. It is normally carried out without direct supervision by the employer or the contractor.

This definition clearly rules out inclusion of self-employed workers in the category of homeworkers.

In the context of the macro debate on feminisation and flexibility and an analysis of the different meanings of flexibility and feminisation, I would like to indicate that I use all dimensions of flexibility - numerical, financial and functional - in my analysis. In focusing on the relationship of flexibility to feminisation/masulinisation, the key question is to see which processes, sites and types of jewellery production are masculinised and feminised, and then to examine the relationship of flexibility to masculinisation or feminisation.

2.4 CONCLUSIONS

Chapter 2 reviews the core literatures on gendered employment in world market factories and globalisation, feminisation and flexibility. A critique of the gendered literature on EOIs and EPZs shows a need for a closer look at the processes of gendering, using tools of discourse, subjectivity and identity. This approach gives voice to the women and men

workers, and broadens our understanding of the dynamics of the local and the micro level context.

The macro level debates on feminisation and flexibility are still unresolved. In the context of India flexibility is not a new concept, and has existed in the form of informal labour markets and also little applicability of labour laws in the formal labour markets. However the dynamics of flexibilisation and feminisation/ masculinisation, in different sites and forms of jewellery production, will offer some interesting micro level insights on the debate.

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[1] 'The "aspiration wage" is the level at which a person would be prepared to accept employment; the "efficiency wage" is the wage level at which a worker would work with optimum efficiency once in employment' (Standing, 1989:1094, endnote).

[2] The ILO Yearbook of Labour Statistics 1991, shows a decline in the female share of employment in textiles in Kenya, Mauritius, Hong Kong, India, Republic of Korea, Singapore, Austria, Belgium, Czechoslovakia, Finland, France, Norway, Sweden. Australia, Zimbabwe in the eighties. It shows a decline in the female share of employment in electrical machinery in Kenya, Australia, Federal Republic of Germany, Hong Kong, Republic of Korea, Singapore, Austria, Belgium, and Czechoslovakia.

CHAPTER THREE

METHODOLOGY AND THE RESEARCH PROCESS

3.1 INTRODUCTION

This chapter details the process of my research and the methodological issues raised in the course of doing my research. The chapter discusses the epistemological shifts I made in moving from economics to women's studies, and from positivism to 'situated knowledge'. The chapter then goes on to discuss the dialectical process of doing my research and the interaction of theory and data. Finally I take up my field experiences and the dilemmas of power and othering in the field.

3.2 FEMINISM AND ECONOMICS: METHODOLOGICAL ISSUES AND DEBATES

The question of epistemology has not been considered worthy of study in mainstream economics. Mainstream economics accords low priority to the history of economic thought. Strassman argues that economists view the construction of knowledge as emerging from a free and open 'marketplace of ideas' and being based on meritocracy (1993: 148-149). Thus mainstream economics does not recognise the role of power and values in the construction of knowledge in the same way as it does not recognise the role

of power and values within the discipline. This makes neo-classical theory impervious to criticism and results in non-recognition of its limitations in providing *the explanation.*

Economics, like the natural sciences, shares the assumption of the 'rational being'. The androcentric assumption of a rational economic man engaged in maximisation of his utility is the cornerstone of much of mainstream economics. Sen (1990) has traced the origin of economics to 'engineering' on the one hand and 'ethics' on the other. Mainstream economics relies on the engineering approach, and is positivist in nature with much reliance on objectivity. The said objectivity is achieved in economics through abstract models and use of advanced econometric analysis. Mainstream economics relies on mathematical analysis and does not recognise the role of observation and interpretation as adequate tools of knowledge generation. The advanced mathematical tools are in most cases applied to secondary data sets. Thus the insights emerging from first hand data collection tend to be lost.

According to Mirowski (1989) economics has borrowed much from physics. The modernist and positivist orientation of economics today can be seen in the emphasis on falsifying tests, which is the hallmark of scientific method (McCloskey; 1985: 13). However, simulation and hypothesis testing in economics is not based on pure falsification. Simulation is affirmative and not falsifying and the probabilistic nature of the null hypothesis and the presence of alternative hypotheses spoils falsificationism (McCloskey; 1985: 14-15). The implication of this argument is that the rhetoric of

positivism does not recognise implicit value judgements of the 'economic scientist'. The value judgements of economists are implicit in the assumptions of the model, the hypothesis to be tested and through the method used to test it. However, the positivist orientation of economics results in little importance being accorded to the questionability of these assumptions.

Feminist scholarship emphasises the importance of 'situated knowledge' (Donna Haraway, 1988). Strassman (1994) questions the 'intellectual gatekeepers of economics', who assume a perfect objectivity in the 'market place of ideas' and lay emphasis on mathematical models as the only basis of theory. Knowledge production is a social process, which is deeply embedded within personal, cultural, and political values (Strassmann, 1994: 155). This critique of mainstream economics does offer scope for assimilating the understandings from other disciplines, to make economics more sensitive to gender.

Having done my graduation, Masters and MPhil in mainstream economics and having taught economics for eight years to undergraduate students, moving on to women's studies has meant a lot of unlearning and new learning for me. Doing my thesis in interdisciplinary women's studies has meant moving away epistemologically and methodologically from mainstream economics and incorporating insights of anthropology, sociology and feminist methodologies in my research. As a feminist

economist I work from the margins of economics and am like an 'outsider within' economics.

Standpoint epistemologies uphold the social situatedness of knowledge and the superiority of knowledge claims that emerge from a feminist standpoint. In the words of Harding (1993: 56) 'Starting off research from women's lives will generate less partial and distorted accounts not only of women's lives but also of men's lives and of the whole social order.' According to Smith (1990), starting from women's lives can generate questions about why it is primarily woman who are assigned sexual, emotional and domestic work and the consequences for the economy and social institutions. While one cannot deny that the insights provided by the lives of marginalised people are better sites of knowledge than the beliefs of the dominant class, research which incorporates multiple standpoints, of women and men, of workers and employers, will give a more holistic picture of the social reality. The materials I have collected are based on multiple standpoints: those of the entrepreneurs/managers, of contractors/subcontractors, of artisans, and of workers male and female. I do not think that feminist research needs to focus exclusively on the standpoint of women. Rather, analysing the multiple standpoints of women and men might give us better insights into the lives of women and provide a certain locus for comparison. Including the perspectives of men or of a dominant class in the study does not imply an uncritical acceptance of their standpoint. In fact a critical evaluation of the standpoint of the dominant can provide an important resource for understanding the standpoint of the dominated.

However, in examining the subjective accounts and experiences of different people my position as a feminist economist has played a key role. My multiple positionality as an Indian, middle class, woman, and a Lecturer in Shri Ram College of Commerce doing a PhD in the UK, played a very significant role in securing access to the entrepreneurs and also affected the response of my respondents and their perception of me.

The information that one collects in the field is determined by the kind of access that one is able to get in the research. The access one seeks is determined by the project, but the access one gets also reshapes the project. Thus in the field there is a constant iterative process taking place between theory and data. In this complex interaction the gender, race, class and the theoretical and disciplinary leanings of the researcher influence the research: so that all knowledge claims are situated, unique and local.

The research is also influenced greatly by the perceptions of the respondents of the researcher and her research. These perceptions may not remain static and may change through the course of the fieldwork. In this case the judgement of the researcher about the perception of the respondents influences the course of the research.

3.3 THE DYNAMIC PROCESS OF FIELD RESEARCH: EVIDENCE AND THEORY

In this section I show the complex interaction of my data with my theoretical reading, which determined the course of my research and research questions as they evolved over

time. My research has been a combination of deductive and inductive methodologies. I went to the field with theoretical frameworks, some of which were challenged and changed by the evidence and gave way to new research questions. I undertook field work between May 1996 and January 1997, and then made a follow up field trip between July and September 1998.

I went to the field after reviewing the gendered literature on the international division of labour pertaining to SE Asia and Latin America and on the export units in India. The introduction of liberalisation policies in India since the mid 1980s, coupled with very few gendered studies on any export sector in India, inspired me to study the gendered labour process in NEPZ. As mentioned in Chapter 1, the jewellery industry has been chosen because of the relatively few gendered studies of this industry and because it accounts for the maximum share in the total exports of NEPZ.

From my initial talks with the entrepreneurs and managers I learnt that some of the handmade jewellery units in NEPZ have branches in Delhi. I took this as an opportunity to extend my study to cover these units. I planned to compare the conditions of work of women working in NEPZ, where jewellery production is solely for exports, to those of women working in Delhi, where jewellery is produced for the domestic and the export market. I also intended to make a comparison of the conditions of work of men and women. I considered this to be important in the context of the lack of a comparative standard for women's work in the existing literature on EPZs identified by Lim (1990).

However, in the course of doing research and gathering evidence, the significance of my initial question diluted, giving way to other issues that were more pertinent.

In contrast to the literature and contrary to my expectations I found that handmade jewellery production operates with a complete absence of women in NEPZ. Machinemade jewellery production in NEPZ, on the other hand, has women making up around 25 percent of the workforce. In Delhi there is a marginal presence of women as hidden unpaid labour. Gradually it unfolded that the handmade jewellery labour market in NEPZ and Delhi works on informal lines and that male children and men are inducted through kinship networks, primarily from the villages of the Medinipur district of West Bengal. This opened up many more interesting opportunities of research and diluted the significance of my initial research question.

The exclusion of women from handmade jewellery production in NEPZ, and their marginal presence in Delhi, made me think of the nature of participation of women in Medinipur. I pursued the question of women's participation in jewellery production in Medinipur with the male artisans, who largely denied it. Later I learnt from some women respondents in Delhi that many women were engaged in chain weaving in Medinipur, particularly in the village of Panna. This led me to include Medinipur as a part of my study, which I had not planned before.

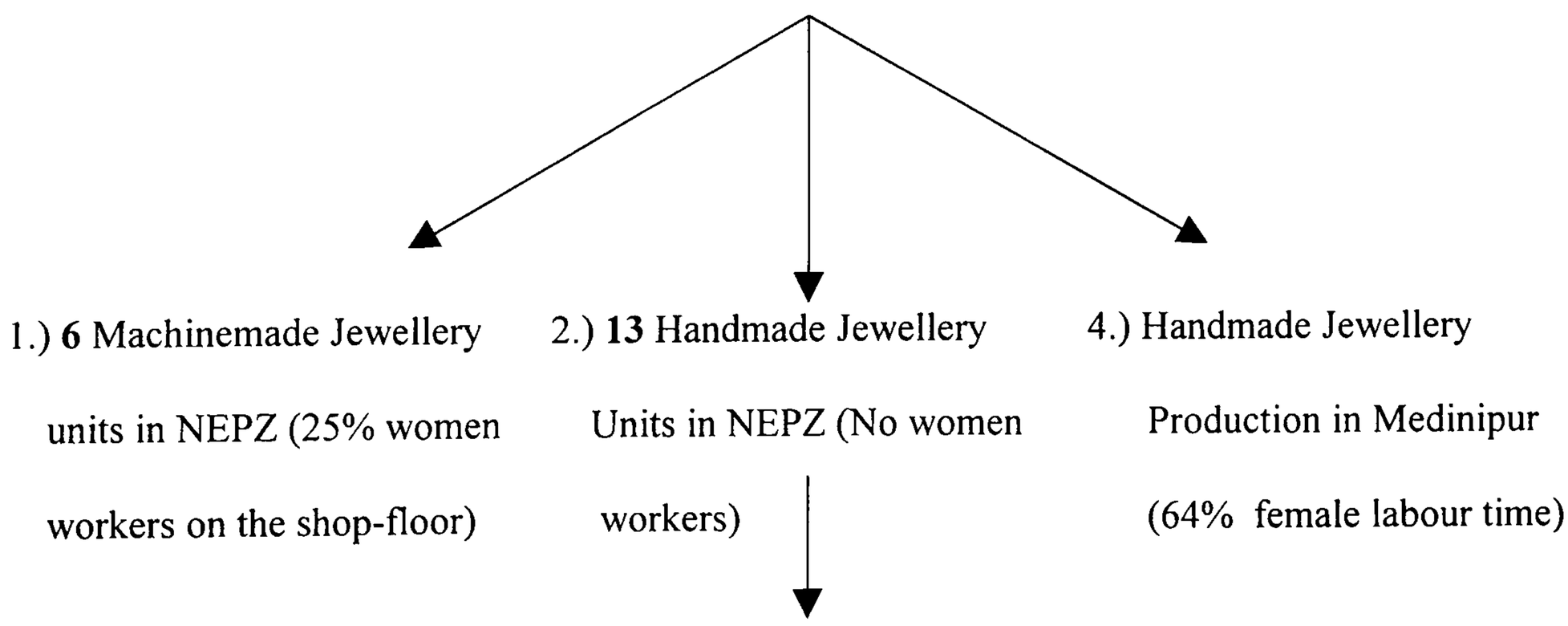
My research has also been influenced by a reading of the feminisation debate in the context of SAPs and restructuring globally (Jenson, Hagen and Reddy 1988; Standing, 1989; Elson, 1996) and in the context of India (Deshpande and Deshpande, 1992; Shah et al, 1994). I sought to collect longitudinal time series data on the employment of women and men in NEPZ and Delhi to study the implication of SAPs on the gendered composition of employment and the relationship of feminisation to flexibility, if any. However, though I did get access to the central data in the zone, I did not carry out a quantitative analysis to study the changes in the gender composition of employment since SAPs. This was because many companies were set up only five to six years ago and the gender disaggregated employment figures were not available for more than three years.

Having established the broad shifts in my research, I now summarise the scope of my fieldwork and my sources. In NEPZ there are units engaged solely in handmade jewellery production, units engaged in both machinemade and handmade jewellery production, and units engaged solely in machinemade jewellery production. The units producing both machinemade and handmade jewellery have been categorised under machinemade jewellery production only. This is because entrepreneurs/managers were unwilling to give access to the workers in handmade jewellery production in these 'dual' units as many were not registered to produce such jewellery. On paper there are thirty-five units in gems and jewellery production in the zone but of these only twenty-one are in operation. This is so because many units have closed after defaulting on the gold loans from the Mineral and

Metal Trading Corporation (MMTC) and/or non-fulfilment of the minimum value addition[1] on the gold imports.

Of the twenty-one units operating I got access to nineteen, thirteen in handmade jewellery production and six categorised as machinemade jewellery production. Of the latter, four are producing both machinemade and handmade jewellery and two are producing only machinemade jewellery. Of the thirteen units in handmade jewellery production, seven have sister concerns in Delhi, which are in most cases engaged in supply for exports and also for the domestic market, and form a part of the study. Together with the coverage of Medinipur, I show the scope of my study in Figure 3.1 below, which also summarises the participation of women.

Figure 3.1 Sites and Types of Jewellery Production Studied



I now turn to the sources of my research and research tools, starting with my questionnaire survey in the zone. I first did a pilot survey with the questionnaire in the zone, and got feedback from two entrepreneurs personally, who had no changes to suggest. Next I posted the questionnaires to the entrepreneurs of the thirty-five listed jewellery units in the zone. The questionnaire survey was aimed to discern the ownership type of the units, the nature of jewellery produced, the extent of subcontracting, the company policy on recruitment, the gender composition and demographic profile of the work force and the skill categorisation of workers by gender. The format of the questionnaire is shown in Appendix I. I avoided putting in any sensitive questions relating to wages and related benefits for the workers in the questionnaire. The postal response to the questionnaire was as low as four. However, I was able to get the questionnaire filled in personally for fifteen other units in my initial meetings with the entrepreneurs/managers, so that I collected nineteen questionnaires from the zone. In my later meetings, seven entrepreneurs with common ownership in Delhi filled in the additional questionnaires for Delhi.

The questionnaire survey was followed by intensive interviews with nineteen entrepreneurs/managers. In handmade jewellery production the focus of the study is on four factory workshops in NEPZ and two workshops in Delhi, where repeated visits were made: semi-structured interviews with thirty-two male contractors/artisans/employees in NEPZ and Delhi were held. Seven male child/young workers in handmade jewellery production were interviewed in Delhi. My sampling can be termed as theoretical

sampling (Mason: 1996)[2] given the constraints of access, and many times involved crossing the 'boundaries' of a definitive sampling frame. One such crossing over was the inclusion of women homeworkers in Delhi. Of the four women homeworkers I was able to trace, three did not work for the sample companies, but form a purposive sample in my study.

Twenty-two female and nine male workers were interviewed in the factory premises of machinemade production units in the zone. Follow up visits to fourteen workers at their home was made. Contacts were made with five new female workers and one new male worker, in the neighbourhood of other workers or related to the workers who were contacted at home. My visit to Medinipur involved talking to ten men and thirteen women, in Panna and some adjacent villages. The details of the questionnaire survey and interviews conducted are shown in Table 3.1. While it would have been ideal to include in the Table the total number of potential respondents in each category, in practice this was not possible for many categories and I have therefore not included this information. In case of machinemade jewellery production the company wise break up of total number of male and female production workers and the numbers interviewed is shown in Table 4.2 in the following chapter.

Detailed qualitative analysis derived from interviews with managers, contractors, male and female workers in factories, workshops and homes, and the observation of production and labour process, changed the emphasis of the research. It evolved to be an examination

of the gender dynamics of the different processes in the two different forms forms of production (handmade and machinemade) and in the three different sites of jewellery production (NEPZ, Delhi and Medinipur).

TABLE 3.1 Questionnaire Survey and Interviews Conducted

	Questionnaire		Interviews	
1.) Machinemade Jewellery Production, NEPZ	Male	Female	Male	Female
Entrepreneurs/Managers	4	2	4	2
Shopfloor level workers and supervisors	-	-	10	27
2.) Handmade Jewellery Production, NEPZ				
Entrepreneurs/Managers	13	N/A	13	N/A
Contractors	-	-	4	"
Artisans	-	-	9	"
Employees	-	-	6	"
3.) Handmade Jewellery Production, Delhi[3]				
Contractors	-	-	2	N/A
Artisans	-	-	4	"
Employees	-	-	7	"
Child/Young workers	-	-	7	"
Unpaid family workers	-	-	N/A	4
4.) Medinipur				
Contractors	-	-	3	N/A
Artisans/Subcontractors	-	-	5	"
Migrant artisans	-	-	2	"
Homeworkers	-	-	N/A	10
Unpaid Family Workers	-	-	None	3

Two key questions which evolved from the interaction of theory and data and which have been outlined in the previous chapter are:

- What are the gendered processes which constitute the feminisation and masculinisation of production in the three sites: NEPZ, Delhi and Medinipur?
- How does the feminisation and masculinisation of production in the three sites relate to flexibility?

My research also sought to give 'voice' to my respondents and the meaning of work in jewellery production for them. Ong (1988) has criticised the literature on the new international division of labour for reducing the significance of women to 'a source of cheap labour' and giving little importance to the social meanings the economic changes have for women.

I have summarised here the scope of my research, my sources and my research tools. However, arriving at these has been a 'messy' process. In giving voices to my respondents, I have encountered important issues of power, reciprocity, access, and othering. The following section takes up some of the detail of this process. Because of lack of space I take up only the very intensive and iterative experiences of my fieldwork. All names of the companies and people shown in the study are pseudonyms.

3.4 ISSUES OF POWER, ACCESS AND REPRESENTATION IN THE FIELD

Feminist research generates issues around power between the researcher and the researched due to power differences stemming from their different positionalities, power exerted during the research process such as defining the research relationship, unequal exchange and exploitation, and power exerted during the post field period of writing and representing (Wolf, 1996).

Feminist standpoint theories (Hartsock,1983; Harding,1991) emphasise the positionality of the researcher as a woman as crucial in understanding the oppression of women. However, this has generated questions of differences of race, class and ethnicity between women, and deconstructing the category 'woman' raises the question of multiple standpoints. The issues of power differences along axes of gender, class, race, caste and so on concern the question of the insider/outsider status of the researcher in the field. However, in the actual process of research one has to negotiate between the position of insider and outsider, rather than being fixedly assigned one or the other subject position (Lal, 1996: 193).

In the following sections I seek to discuss the process of my research and the questions of power, reciprocity and othering raised in different locations and sites across differences of class, gender and age. The power relations between me and my respondents changed during the course of my research, as I occupied the status of being both an insider and an outsider in the lives of my respondents. My class background and education, which played a crucial role in getting me access to the entrepreneurs/managers in the zone, and in Delhi, also distanced me from the workers and artisans, at least initially. However, my relationship with male and female workers, though not uniform for all the workers, shifted in many cases from being characterised by their awe and reluctance to be interviewed, to one of co-operation, familiarity and an expectation of reciprocity in some cases.

3.4.1 The Reversal of the Power Axes: Access to the Zone

The process of negotiating access to NEPZ was through the top bureaucracy in the zone due to severe restrictions on entry. Here my status of being a Senior Lecturer in a prestigious college of Delhi University played a key role, as did the contacts of my father, a retired defence scientist, with the Joint Development Commissioner of NEPZ. The Joint Development Commissioner gave me a covering letter introducing me and my research, and requesting the entrepreneurs to cooperate with me. In the course of negotiating access with the entrepreneurs in the zone I had to hide my positionality as a feminist and highlight my background as an economist interested in a gendered perspective on employment.

After much persuasion and repeated telephone calls I was able to get access to nineteen of the twenty-one jewellery units in operation. One of the problems I faced doing research on the jewellery units is the precious nature of the metal and the resulting security measures. Due to defaults on the gold loans by some of the units before and during the course of my main field trip, and the Central Bureau of Investigation inquiries going on into the same, the security measures were greater in the zone. This also led to an accentuation of scepticism among some of the entrepreneurs/managers in the zone.

The first meeting with the entrepreneurs/managers, which was followed up with many subsequent meetings, was spent in filling in the questionnaire and also getting some

details of the process of production, the gender division of labour and some qualitative information relating to the conditions of work of the workers and the company policies. In some cases I got to see the factories in the first meeting itself. The interviews with the management were not tape-recorded but I made notes and followed up with more detailed field notes the very next day, in most cases. Able to get initial access only after much persuasion, I did not want to jeopardise my future access to the companies by making a request to tape record the interview. The interviews with the managers were carried out in English.

In the course of my research I talked to the entrepreneurs/managers and also questioned them in a more open-ended way. However, it was not until I visited the workshops and talked to the artisans that I got a real feel for the issues and the much desired in-depth information. It became clear during my research that the labour process of handmade jewellery production in the zone was generally too complicated to fit into the neat categories of the questionnaire. I also found that the officially stated categorisation of the workers into unskilled, semi-skilled and skilled, and the minimum wage legislation, had little real validity, even in the case of machine jewellery production.

The study revealed to me the many loopholes a survey method of research, such as prevails in economics to generate large sets of quantitative data, can have. I also felt it was the researched who were all powerful; I often felt disempowered as I was repeatedly

told to the entrepreneurs/managers later and in many cases the agreed appointment time and even dates were not kept by them.

However, the relationship with the managers was not uniform across my respondents. There were some managers, like Manoj, who were very cooperative not only in giving me very good access to his company, but also in introducing me to managers of other companies. On the other hand, there were entrepreneurs like Bharat who agreed to be interviewed only after much persuasion and repeated telephone calls and later was reluctant to provide me with any access to the workers. Manoj, one of the key respondents among the entrepreneurs, liked to elaborate on the difficulties he faced in operating from the zone due to restrictions on mobility and access to gold and in getting a skilled work force due to its remote location. He also elaborated on the reduced differential advantage of operating from the zone after liberalisation and SAPs. He explicitly mentioned to me that he was co-operating with me because he was impressed by my credentials and hoped that my study would highlight the difficulties faced by entrepreneurs in the zone. This 'trust' at times did give me a certain sense of guilt at hiding my feminist standpoint. Negotiating access from above and being an 'insider' to the managers' world through my class affiliation meant hiding my 'outsider' perspective.

In my interaction with the male managers, I did not feel less powerful because of being a woman, but due to my status of being dependent on their goodwill for access to the information from them and also as an initial contact point for workers. I do not think that

the axes of gender/class/ race etc always work uniformly to define our power equations in all situations and contexts.

3.4.2 Interviewing in the Factories of Machinemade Jewellery Production

The initial interviews with the workers in machine jewellery production were carried out in the office premises and lasted for an hour on average. Only in three of the six companies were I alone with the workers. In the case of the other three a person from the management was present during the interviews. This meant that sensitive questions on unionisation, job satisfaction and job security could not be asked of some workers in the first meeting. Getting access through the managers and interviewing women in their work hours meant that there was little scope for informal conversation and reducing the implicit power differential between me and my respondents during my first meeting with them in the factory premises. Access through the entrepreneurs positioned me as an 'outsider' to the workers. Lal (1996) notes in the context of her ethnographic research in the electronic and textile factories in Delhi:

> The research situation often places the researcher in an overly powerful position vis-à-vis research subjects and this inequality is exacerbated by the researcher's often necessary relationship with access providers who may have control over other research subjects. This is an especially likely outcome of nonparticipatory industrial ethnographic research where the researcher does not have unmediated access to the research subjects (ibid: 196).

Nonetheless, I tried to build the confidence of my respondents about the purpose of my research, alleviating the fears of some that it would have a negative effect on their job or

lives. All the interviews with the workers were carried out in Hindi and all except two were tape recorded, and later translated and transcribed by me. In my interpretations I have tried to be close to the actual words spoken. However, in translating from Hindi to English, it is not always possible to capture the meanings by sticking to a strict one to one interpretations of words. In such cases I have tried to capture the essence of the spoken sentence in my interpretations.

The initial response of my women respondents varied across the sample. For example Swarna was very nervous at being interviewed and reluctant to cooperate. Her nervousness stemmed also from the presence of Deepa Sharma, the export manager, throughout the interview. Swarna intervened twice in the course of the interview to say that she would like to go back to work. On the other hand women like Preeti, Purnima, Alka and Mrinalini, seemed to develop a confidence in me, were spontaneous in their replies and readily gave me their residential addresses. All the instances where I built a good rapport with my woman respondents in the first meeting were cases where no member of the management was present in the course of the interview.

Purnima was one respondent who seemed to build a particularly good rapport with me, being forthcoming in her responses. She gave her address very willingly and displayed her dissatisfaction with the policies of the company. Many a time she would end her sentence with the question *'hai ke na'* meaning *'isn't* it ' and ask for my confirmation. Amita, another woman respondent, was quite forthcoming in her replies but seemed to

underline the class difference between us by addressing me frequently as Madam during the course of the interview. My being a woman did play a crucial role in developing empathy with the women respondents. However, positional sameness and difference with my respondents did not work in a linear fashion and nor did the relationship remain the same in the course of the research. It was in my follow up visits to my respondents' residences that they developed the most confidence in me and were the most open about their experiences in the factories and home.

3.4.3 The Meetings at Home

Follow up visits were made to thirteen women and one man, at their homes. Contacts were also made with six new informants - five women and one man - in the neighbourhood of other workers or related to the workers who were contacted at home; so that I interviewed twenty workers at home. These interviews were carried out in the last phase of my field trip, to avoid any complications that could have possibly arisen if I had to return to the factories for additional information after my meetings with the workers at their residence.

The process of locating the residence of my respondents was typically both tiresome and lengthy. In some cases the addresses provided were incomplete or the respondent would have changed residence in the intervening period. Many of my respondents lived in urban slums in colonies of clustered houses, in narrow lanes, or sometimes in single or double

rooms of a house with a common entrance. Often landmarks like a temple, a teashop or a sweet shop were helpful in locating the house. I normally interviewed the women on Sundays when they were off work. Since most of the women did not have telephones in their houses, I could not fix my appointments with them. This meant that many women were caught by surprise, and sometimes I would catch them in between their daily chores of washing, bathing or sweeping. Though I intruded in their weekend schedules and also intruded in their personal and work lives through my questions, I was not made to feel an intruder, because of the very warm and friendly welcome extended to me on my arrival.

My talks with my respondents at their residence were in the nature of 'structured conversations', which lasted between one and two hours. I was able to tape record all of them. It was here that I was able to get in depth information about different company policies and the many overt and covert ways in which women resisted the control of the management. I found in many cases not only that it was I who was keen to listen, but that many women wanted to talk and wanted someone who would listen to their story. There were many instances when I felt an 'insider' as an Indian woman, our shared identities as women making my class difference seem insignificant to me. One such instance was my meeting with Jyoti, who fought sexual harassment and was able to get herself reinstated in the company after her termination.

Jyoti lived near Poonam's house and Poonam took me to her house. I had first heard about Jyoti's sexual harassment through the manager, who gave his side of the story saying that

Jyoti was making false charges against the supervisor. I was very keen to meet Jyoti, and to my surprise Jyoti was equally keen to meet me and tell me her story. She said that she was keen to talk to me when she learnt that I was meeting the workers in the factory, but was not allowed to do so by the management because she was considered as a vocal worker. The structured conversation with Jyoti lasted for more than two hours, and the transcript runs for over seven thousand words.

There were also many other interactions with women at home where I felt my positionality as an Indian woman was primary and that the class difference with my respondents became secondary. It did not disappear however; several women would freely vent their anger towards the managers but later express their worry that it might have an adverse impact on them. For example Sunayna, when describing her dissatisfaction and sense of being exploited in the company, said:

> All are the same, they make us slog and they do not want to pay us. Sometimes I feel so angry that I would leave my job tomorrow. I would not like to continue in this factory. I will lose my vision and also my thinking here. There is so much thinking involved in this work. The manager does not have any brain of his own.

However, after about an hour and a half she suddenly began expressing deep concern that her critique should not be conveyed to the managers. Her fears were allayed after my reassurance. Thus I felt that different aspects of my multiple positionality - as an Indian woman, as from a middle class elite background - took primacy at different points in my interaction with respondents.

In some cases, the circumstances of the workers in relation to their job also affected their response to me. Three of the women had been terminated at the time of the follow up. This made Roopa and Gayatri openly critical of the company policies. On the other hand Madhu was reluctant to talk to me as she thought the termination was temporary and that she would be reinstated again.

Some women respondents were overwhelmed on seeing me. Gayatri, on seeing me at her residence, commented *'Aap itni bari hai, phir bhi aap mere ghar aayi'* meaning 'You are from such a high class background, still you have come to my house.' Such comments made me feel embarrassed but they also highlighted that the difference of class, which made me an 'outsider', did not necessarily distance me from my respondents. Gayatri, while talking at length about herself, also asked me about my family and my work. She was very friendly and I seemed to have developed a special empathy towards her. On all occasions of my visits to the residence of the women respondents, I was greeted warmly and a very touching hospitality was extended to me. I tried to reciprocate by taking small gifts of Indian sweets for them.

In the field we 'work the hyphens' between Self and Other (Fine, 1994). I worked the hyphen by empathising with my women workers, answering their queries about me, listening to them, and by taking small gifts. However, in listening and learning from my respondents, in fitting their 'voices' selectively into my conceptual framework, it is I who will gain an academic qualification. Reflexivity in one's research does not alter the power

dynamics, nor does the reduction of the hyphens of othering change the world of 'others', which we appropriate to write our theses and books.

3.4.4 Researching in the Workshops

There is very little written in feminist literature on the methodological issues arising from researching men from a different class background. My research on handmade jewellery involved repeated visits to all-male workshops in Delhi, where I was a non-participant observer and conducted semi structured interviews with male adult employees, artisans, contractors and child/young workers. In the case of the adult male employees/ artisans, who were all Bengali and had migrated from villages, I was 'other' and an 'outsider' through my positionality as an urban, non Bengali, middle class woman. The redressal of the 'superior' position of class by 'inferior' gender position (Razavi, 1993) did not seem to happen in my case. Despite my empathy, my will to listen and some reciprocity through the taking of small gifts, my privileged social background seemed to take pre-eminence in my relationship with male adult employees/artisans. In the case of child/young workers, my age was an added variable of difference and the child/young workers seemed to be in awe of me.

The initial access to the workshops of Delhi had to be negotiated through the entrepreneurs and managers. I remember the shock and dismay expressed by Bharat, who owned a factory in NEPZ and a showroom in Delhi, upon my request for the address of

and an initial introduction to the workshop which provided him with the jewellery. He said 'It will be difficult for you to go in the dirty and dingy workshops, inhabited by all men.' He added ' I will call the workers in my showroom and you can interview them here.' It was much later that Bharat's manager talked to Sudesh, the main contractor of Bharat, on the telephone and fixed a meeting with him at his residence/workshop. Sudesh was to become my key respondent and contact point for my research in the handmade jewellery workshops.

I would not deny the initial apprehension I felt on visiting the workshops in Raigerpura. Raigerpura is an unplanned colony in Delhi characterised by unclean surroundings, resembling an urban slum. I remember the doubtful looks on the faces of the residents of that area on my asking the workshop addresses. Some would straight away start asking the purpose of my visit. However, this uncomfortable feeling did not stay with me for long on visiting these workshops. I did not feel threatened by the all male surroundings, though I did feel uncomfortable and an outsider on my initial visits to the workshops.

Sudesh is one of the more prosperous contractors who owns a house in Raigerpura. The third and the fourth floor of the house comprised two rooms each and this was Sudesh's workshop cum residence, where around sixty workers resided and worked. On my first visit to Sudesh's workshop cum residence, Sudesh and his wife greeted me with much hospitality. After talking to me for sometime he was convinced of the genuineness of my research and I had found one of the richest sources for my project.

In the course of my visits to Sudesh's workshop I developed the confidence of his wife and his manager, such that I was able to visit the workshop in his absence. Sudesh not only gave me good access to his workshop but also helped me in tracing at least three more women, other than his wife Sona, involved in handmade jewellery production. Being a big contractor he was known to most of the other contractors and workers in the Raigerpura area. He was helpful in giving me tips on going to Medinipur, and my main contact point from Delhi on my visit to Medinipur (a woman involved in subcontracting) was introduced to me through Sudesh. During my visit to Medinipur, I also visited Sudesh's village and met his family there, which proved quite useful.

If I try to reflect on the reasons for such a positive response from Sudesh, I think it was because he is a well meaning and friendly person and also perhaps because he wanted to develop good contacts with me as a person from the educated class. Sudesh is himself not very educated, but aspired for his children to go into higher education. Sudesh also asked me to send him the addresses of jewellery units in the UK, which I did post to him on my return to UK.

In the later stages of my fieldwork my relationship with Sudesh became strained, as Sudesh became sceptical of the implications of my research for him. This happened because one of the important entrepreneurs for whom Sudesh was a contractor, on learning of my visits to the workshops, warned Sudesh of the adverse implications my research could have on his business. One day when I visited Sudesh's workshop he said:

> Mr Bharat called me in the show room where he scolded me for having helped you with your research. He warned me of the adverse implications of your research on me due to reporting of the prevalence of child labour, non-adherence of pollution regulations, and the absence of welfare measures for workers in my workshop.

I tried to convince him that I would not mention the names of the persons or even the companies in my thesis. But he was less than convinced about it. However, this did not affect my findings for it happened in the later stages of the fieldwork. Later, on my follow up field trip of two months in India, I went to meet Sudesh and his wife Sona and took some gifts to his family. They both welcomed me as we talked at length about my work, my family, his jewellery business, Sona's music classes etc.

The second major workshop in my study was the one owned by Tapas and his three brothers. They were managing the factory of Joshi in the zone and also operated from Raigerpura, where they manufactured jewellery for many showrooms and export houses. First I got to meet the youngest brother Nimi in the zone. He was very forthcoming in his replies and provided me with the workshop address for Raigerpura and also the telephone number of a nearby shop. This workshop in Raigerpura became another very important site for my study. Tapas is a contractor, though not as rich and successful as Sudesh. All told around fifty artisans worked for Tapas. In this workshop I noticed a regular transfer of workers between Raigerpura and the zone depending on demand fluctuations. In my initial meeting with Tapas in his workshop in Raigerpura, he seemed quite sceptical of my research and the possible tax implications this could have for him. However, after a

detailed explanation of the purpose of my research he seemed to be convinced. In the course of my visits to Tapas's workshop, I was able to build a good rapport with him and in many cases the artisans would agree to talk to me following his persuasion.

Semi structured interviews with the artisans/employees in the workshops of Delhi were carried out in an informal setting. In most cases the artisan/employee would continue to do his work - drawing the wire, making *raizi* (small round pieces of gold, used in the jewellery*)*, setting jewellery, and soldering. The initial interactions with the artisans/employees were very formal and many were reluctant to be interviewed. Often the artisans/employees showed a look of exasperation on my visits to the workshops, as I did cause some intrusion in their work. Sometimes, they would pass on the task of being interviewed to each other.

The difficulty in getting access to the child/young workers was due to the subcontractor's awareness that child labour was an illegal practice, which was being publicised on the television at the time. The subcontractors would explain 'He is afraid, he will not be able to reply properly', or 'He knows very little Hindi.' The child /young workers were also very apprehensive of talking to me, which was induced by my positionality as an elite non Bengali woman and also because many seemed to be in a powerless position in relation to their mentors, who were often present in the course of the interview and who also tried to answer on behalf of the child /young worker. The difficulty in interviewing child/young

workers also arose because by interviewing child workers, I gave voice to them in a social milieu where they rarely had any voice.

My repeated visits to the workshops seemed to make the employees/artisans more comfortable. During the course of my visits to the workshop the feeling of intrusion and of being an 'outsider' lessened. Gradually the respondents became quite friendly and questioned me on the purpose of my research. On my explaining, one of them said 'How can anyone be interested in knowing our lives and the nature of our work? It would make a very boring book.' One of them asked my salary and when I told him my salary of Rs 10,000 per month as a Senior Lecturer he commented 'What do you do with so much money?' In all these visits I was moved by their poverty, and their toil.

On my visit to the workshop before my departure for Medinipur, to get the full addresses of the artisans/employees, many were especially keen that I visit their families and their homes. Drupad said that his house was quite big with a separate bath and toilet and that I should stay with his family for at least a month. I was very touched by this gesture of hospitality despite so much poverty.

All the artisans/employees explained in detail the routes to their villages and homes. They also explained the alternative modes of transportation available. Some of them said that I should wait until February when many artisans would be going to their villages for 'Saraswati Puja'[4] so that an artisan could accompany me to different villages. I realised

that had I gone to Medinipur in October in 'Durga Puja'[5], when many artisans go to their villages, I would have had little problem of access to their families and of interpretation of Bengali.

In the case of my interactions with the male employees/artisans I sympathised with them for their toil and their low remuneration, and reciprocated in part for their time by taking small gifts of Indian sweets. Though gender did not seem to disempower me it definitely 'othered' me in all my interactions with the male respondents. Despite my empathy with the male employees/artisans I could never be an 'insider' into their world in the way I could be in the case of my woman respondents. Even today when I confront my privileged positionality in writing and interpreting the lives of the artisans, I can hear the words of Kirti, an artisan echoing 'What will you do for us *didi* (meaning 'elder sister')? You come here often and talk to us, get information from us, as a part of your work, but will it improve our lives?' Even today I do not have a clear-cut answer to this, but the question continues to haunt me.

3.4.5 Visit to Medinipur

As I have mentioned in the previous section, the decision to include Medinipur in my study was induced by the evidence of a large number of male migrants from the Medinipur district of West Bengal and also upon learning from Suneet of the existence of women chain weavers in the villages there. I went to Medinipur after co-ordinating my

visit with Suneet, who was involved in handmade jewellery production in Delhi. Suneet told me of her visit to Ghatal, a small village town in Medinipur, in which her parents stayed. Her in-law's family was in Panna village, which was about fifteen miles from Ghatal. On my arrival in Ghatal, I left my luggage in Sagnik lodge, the address of which Sudesh had given me, and went straight to the local village shop selling saris. Suneet had asked me to wait for her there, as she said it would be difficult for me to locate her parent's residence. After a wait of an hour Suneet arrived, to my great relief and joy. After having a meal in a small restaurant, we started on the same day for Panna, in the village autorickshaw. The initial access provided by Suneet did help to break the ice, after which I was able to develop the confidence of at least some of the villagers.

The reaction of the villagers to me and to my work was a mixed one. In a few cases, I had met one of the family members working in handmade jewellery production in Delhi, which helped in access. In this context I would like to mention that there were some villagers who took a long time to believe that I had actually met one of their family members in Delhi. I remember how Dhiraj was convinced of my having met his brother in Delhi only when I was able to provide the factual details of his brother from my field notes. In the factories or workshops the workers felt under compulsion to cooperate in my research, at least initially due to my association with the entrepreneurs/managers/contractors, which was disconcerting for me. In the village, however, there was no such compulsion or pressure on the artisans. So in that sense

though I was more of an 'outsider', due to my urban affiliation, they had more of a 'choice' in deciding to be interviewed.

An important issue, which has remained underresearched in the area of fieldwork, is the influence of an interpreter on research. I had to use an interpreter for a few respondents in Medinipur. They were mainly women who did not know Hindi, such that interpretations from Hindi to Bengali and vice versa had to be made. A local person, Tapas, acted as my interpreter and contact point for most people. Considerable persuasion and explanation of my research was needed before Tapas agreed to be my interpreter. His major concern was that his voice would be recorded repeatedly during the interpretations, which could have an adverse implication for him. Tapas had worked in Delhi for a long time, first as an artisan and then as a subcontractor. Tapas's wife Sudha did some of the interpretations for the women folk in the family. The problem of getting a female interpreter locally was not just due to very few women knowing Hindi, but also due to the restrictions on the mobility of women, even within the village. This was the reason for Sudha refusing to go with me to different houses to do the interpretations.

Tapas's knowledge of the local people helped me in many ways, especially in getting access. However, sometimes I felt that his perspective as a male was entering into his interpretations, such as when he found a few of my questions relating to the daily schedules of women to be too obvious to be posed. Sometimes he would try to answer on behalf of the women, and only on my repetition of the question requesting him to pose it

to the women directly would he do so. Although, I was able to develop a good rapport with some of the respondents in Medinipur, despite the language barrier, I often felt that my knowing Bengali would have gone a long way in facilitating the research. Thus when one talks of the class, gender, race, and other barriers between researcher and researched in the field, language and the need to use interpreters should also be included. First, talking in the language of the respondents on a one to one basis is not the same as communicating through an interpreter. Second, the race, class, and gender of the interpreter may influence the research.

An important problem of getting access to the women in the villages of Panna was that usually I had to negotiate access through their husbands, who tried to hide or marginalise the association of their wives in chain weaving. The common reply was 'She knows little chain weaving' or 'She does not weave the chain anymore' or 'She will not be able to talk to you.' In most cases the women themselves were also reluctant and shy to talk to me. I was here an 'outsider', not just through my class but also by my urban background and language. On agreeing to talk to me, some were puzzled by my questions about their daily schedules, and how they fitted chain weaving in.

I realised in the course of my fieldwork that the strategic order of questions and the manner in which the questions are posed is very important. The best strategy is to keep the sensitive questions until the end of the interview or in the follow up visits. One should also be open to answering the questions of the respondents. Many respondents in my case

were interested not just in knowing about my research or the reasons for my queries, but also about my salary, my marital status, my natal family and even about my daughter and her welfare. I remember one of the women respondents, Puja, asking me who was taking care of my daughter in my absence.

There were others, like Prakash, who were very good informants but later feared having provided me with too much information. The fear of the villagers arose from my not belonging to their community, my coming from a city and belonging to an elite class. Some of them had the fear that I was from the government, and from the tax department, so that informing me of their income would have adverse tax implications. In fact my association with the tax department was the most common first impression of the villagers. There were other villagers, like Samesh, who were indifferent to me and felt that my inquiries would not change their lives in any way. But my going to Panna did seem to cause a commotion and all in the village seemed to have known about my visit.

On the third day of my visit to the village, I made it a point to visit the school and to meet some of the teachers, so as to remove any misapprehension about myself. As I understand it, the teachers and the school authorities have an important role in a small village. The news of my visits to the village had spread rapidly. This I learnt when one of the relatively educated persons of the village, Nikhilesh, who was himself a silver merchant, approached me on my way back from the village on the second day. He introduced

himself, asked me the purpose of my visits, and invited me to his residence. He was to become one of the most important and helpful persons in my study.

There were some women, like Parvati, who volunteered to talk and did not have any problem with Hindi. Parvati, unlike most other women, did not restrain herself in openly criticising her husband, though she stuck to the tradition of not speaking his name. There were others, like Urmila, who would insist on my visiting their homes on every visit to the village and were very hospitable. I did amuse many of my respondents in my efforts to bridge the language barrier, when I managed to speak a few Bengali words.

There were some other women who were not interested in talking to me, as they felt it would not help their situation in any way. In contrast to this, there were others who had false expectations of me. One such was Drishti, whose daughters were engaged in chain weaving. After speaking to two of her daughters I learnt that one of her daughters, Puja, had been separated from her husband soon after marriage. Drishti asked me if I would help her in locating her daughter's husband. She also asked me whether I could help her with the marriage of her other daughter. On the one hand Drishti seemed to be irritated by my probing into her domestic affairs and on the other hand she wanted to share with me the details of her daughter's separation. At one point she said 'What will you do about our problems and suffering.' Later she developed the false expectations that I would help her financially and in locating her son-in-law. This reaction I found problematic in two ways. On the one hand I got the feeling of deeply intruding into their private lives. which

accentuated the feeling of 'other' in me. On the other hand I found myself deeply affected by their plight and unable to do much about it.

I developed a good rapport with Puja despite the language barrier. Puja looked very sad and tired. The pain was associated with her being identified as a unique case in the village, where rarely did women break out of a marriage. I felt that she saw in me a person who empathised with her and tried to communicate with her as an individual and not as an object of pity. Puja was keen to know when I would come back to the village and said that I should plan another visit as soon as possible.

In the course of my stay of two weeks in Ghatal, I also went to the village of Mahabatpur, Sudesh's home village, from where I was taken to the adjacent village of Sagar by Sudesh's brother. On my visit to Sudesh's home, after a long and bumpy ride on a rickshaw, I met his three brothers, sisters-in-law and mother. It took a long time to convince his elder brother, Jivan, who was a farmer, of the purpose of my visit and my contact with Sudesh. The apprehension of his brother, as he told me later, was that I was from the tax department. Jivan was very helpful in introducing me to some other families in the village and its vicinity. Since this household was one of the most prosperous ones, it was very well known in the village. I also talked to his younger brother Mukesh, who was a contractor in Calcutta, and his wife Kamal, who had been involved in chain weaving. From here I went to Sagar where I visited the workshop where silver is mixed with other metals and wires are drawn.

My positionality, which simultaneously made me a 'native' as an Indian, but 'othered' me as an elite, non Bengali, with an urban background, did not shape my relationship with the respondents uniformly. I was able to work the 'hyphen' with some of them despite the language barrier, and develop a special empathy as well as some reciprocity through small tokens of gifts of stationery for their children. However, with others I could not bridge the researcher-respondent gap despite my efforts.

3.5 CONCLUSIONS

The above chapter has detailed my research process and the methodological issues raised in the context of my research. Coming from an economics background and doing a PhD in women's studies has entailed epistemological shifts from positivism to situated knowledge. It has involved the incorporation of insights from feminist methodologies, anthropology and sociology in my research. My study incorporates the multiple standpoints of women, men and children, of employers, contractors, subcontractors and employees. These multiple standpoints give a more holistic picture of the social reality.

For me research has meant a complex interaction of deductive and inductive methodologies. The complex interaction of evidence with theory has entailed collection of evidence in the context of literature on the one hand and revision of the theoretical

framework in the face of the evidence on the other. My research questions, though embedded in literature, evolved and changed with the evidence.

In this complex dynamic of theory and evidence, my positionality as an elite, middle class Indian woman, and a Senior Lecturer in a prestigious college of Delhi University, doing a PhD in the UK, has played a significant role in getting me access and has also affected the nature of responses to me and to my research. In the field I tried to bridge the hyphens between self and other by listening to my respondents, by being open to their questions to me, by empathising with them and by invoking a gift relationship, as I negotiated between my insider and outsider position.

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[1] Minimum value additions are calculated for a period of five years from the date of commencement of commercial production. The formula of calculation of value addition percentage is: VA=(A-B)/B where VA=Value Additions, A=Free of board value of exports realised for the first five years of production; and B=Sum total of all foreign exchange outflows during the first five years of production on account of raw materials, components, consumables, spares, payment of royalty etc. to foreign collaborators, payment of commission on exports, interest on external borrowings, including deferred payments, and all other outflows of foreign exchange whatsoever plus the costs including freight value of all imported capital goods (Indian Investment Centre, 1995: 11).

[2] Theoretical sampling means selecting groups or categories to study on the basis of their relevance to one's research questions, one's theoretical positions------and most importantly the explanation or account which one is developing (Mason 1996: 93).

[3] The entrepreneurs and managers here are the same as the ones interviewed in NEPZ, as the units covered are sister concerns of units in NEPZ.

[4] *Saraswati Puja*: A festival of worship of 'Saraswati' the goddess of knowledge and art, celebrated in West Bengal.

[5] *Durga Puja*: The biggest festival in West Bengal in the month of October in which 'Durga', the goddess symbolising energy and power, is worshipped.

CHAPTER FOUR

A PROFILE OF THE JEWELLERY INDUSTRY IN NEPZ, DELHI AND MEDINIPUR: GENDER, AGE AND MIGRATION IN THE LABOUR PROCESS

4.1 INTRODUCTION

This chapter details the jewellery production process in the three sites, NEPZ, Delhi and Medinipur, and describes the gender division of labour in each location. The chapter provides the context for the two analytical chapters, which follow. The first section concentrates on the production process, labour process and wage systems in machine production in the zone. The production process and labour process are related concepts. However for clarity of presentation, under production process I discuss the process of production itself, whereas labour process includes the social relations through which production is organised, the gender and the age divisions of labour and the wage systems. The two sections that follow are concerned with handmade jewellery, which is produced in all the three sites. I first discuss handmade jewellery production in Delhi and NEPZ, the production process being the same in the two locations, and examine the work of 'hidden' women, working as family workers in Delhi. Then I examine handmade jewellery production in the villages. For considerations of space, some aspects of production and the labour process which are more important or complicated in certain site/s are not taken up in other/s. For example to illuminate the complications of the labour process in handmade jewellery production, I take up case studies in Delhi/NEPZ

and Medinipur. However, I have not included case studies for machinemade jewellery production in NEPZ as the labour process here is relatively less complicated.

My study of the three different sites and two different forms of jewellery production shows the varying levels of participation of women and the gender division of labour within different sites, which is permeable in some cases. In machinemade jewellery production women are 25 percent of the workforce, largely segregated in the wax casting, quality control and packaging sections. Men are the bulk of the workforce, as master makers and in gold casting, polishing, filing and stone studding. In handmade jewellery production there are no women in NEPZ and a marginal presence of women as unpaid family workers in Delhi. Subcontracting, induction through kinship and a prevalence of male child/young workers are important features of the labour process in handmade jewellery production. In the villages of Medinipur it became apparent that the proportion of male and female labour is reversed with a majority female workforce, accounting for 64 percent of the labour time, engaged in silver chain weaving as homeworkers. Men and male children and youth here are engaged as a minority in chain soldering and finishing. In some cases when women do engage in chain soldering and finishing they do so as unpaid family workers. In Map1 of India, at the beginning of the thesis, I indicate the three sites, NEPZ, Delhi and Medinipur, which form a part of my study.

4.2 BACKGROUND TO NEPZ

The NEPZ is one of the seven EPZs in India. It was set up in 1985 in the Gautam Buddha Nagar (earlier called Ghaziabad) district of Uttar Pradesh, which is about 24 kilometres away from Delhi, and is spread over an area of 310 acres. The units in the zone manufacture, develop and export a number of items including gems and jewellery, computer software, electronic hardware, textiles and garments, drugs and pharmaceuticals, leather products and toys. Gems and jewellery exports constituted the largest share at 33 percent of aggregate exports in 1996. In my follow up field trip in June-August 1998, the data showed a decline in the share of gems and jewellery exports to 20 percent of aggregate exports, although it is still the largest sectoral share of the exports.

Table 4.1 shows the growth of jewellery exports from NEPZ between 1987-88 and 1996-97, at current prices. The partial convertibility of the rupee in 1991, followed by full convertibility at the current account announced in the 1993 budget, has fuelled the growth of jewellery exports from NEPZ. The partial convertibility of the rupee was at a 60: 40 ratio, which meant that 60 percent of foreign exchange earned from exports was converted at the market rate and 40 percent at the lower government controlled rate. With full convertibility of the rupee the exporters get their entire foreign exchange converted at the market rate.

The Table also shows a sudden downturn in 1997-98, caused by a more stringent policy on the supply of gold. There are three ways of procuring gold for the units engaged in the export of gold jewellery: direct imports, gold advances from a foreign buyer, and through the MMTC. MMTC, the government agency, supplies 70 percent of the gold to the units in the zone, which was about 2000 metric tonnes in 1996.

The MMTC procures the metal from the United Bank of Switzerland and extends it as a loan to exporters who have an obligation to make minimum value additions.

Table 4.1 Gems and Jewellery Exports from NEPZ

Year (April-March)	Exports (in thousands of rupees[1])
1987-88	107
1988-89	4,421
1989-90	6,260
1990-91	4,012
1991-92	82,662
1992-93	518,666
1993-94	640,177
1994-95	1,233,122
1995-96	1,431,800
1996-97	1,502,500
1997-98	1,210, 000

Source: Central Data, Noida Export Processing Zone, Ministry of Commerce, India, July 1998

In 1996, following defaults on gold loans by units in the zone, the MMTC introduced a requirement for collateral against loans.

This is in the form of a bank guarantee, 100 percent in the first year and reduced to 10 percent by the third. This new stringency meant that the exports of gems and jewellery went down, with especially adverse implications for handmade jewellery, produced with a higher carat[2] gold. The availability of work in this sector, heavily subcontracted, declined. Some workers shifted to the sister concerns in the Domestic Tariff Area of Delhi, and others went back to their villages temporarily. Many units that produce both machinemade and handmade jewellery, like Dimple Jewellers, shifted their production more towards machinemade jewellery, produced with lower cartage gold and also in silver.

4.3 MACHINEMADE JEWELLERY PRODUCTION IN NEPZ

4.3.1 Company Profiles

Table 4.2 shows the profile of the six companies engaged in machinemade jewellery production, of which four are also engaged in handmade jewellery production, some on an unlicensed basis. As mentioned in Chapter 3, because of the unlicensed nature of the activity, it was difficult to have access to the workforce here. Thus I concentrated my efforts on machinemade jewellery production for these four companies.

Table 4.2 A Profile of the Sample Companies in Machinemade Jewellery Production in NEPZ

Name of the Company	Date of Incorporation in the Zone	Type of Machinemade Jewellery Produced	Ownership Type	Total Production Workers in Machinemade Jewellery Production, June 1996		Women as % of the Total Production Workers in Machinemade Jewellery
				Male	Female	
Raghav Jewellers Ltd	1992	Studded gold and silver jewellery	Private Ltd Resident Indian Owned	30 (1)	5 (5)	14.3
Dimple Jewellers Ltd	1991	Gold and silver plain jewellery and chains	Public Ltd Resident Indian Owned	65 (2)	15 (6)	18.75
Victor Jewellers Jewellery Ltd	1989	Studded gold jewellery	Public Ltd 40% foreign ownership	60 (2)	25 (3)	29.4
Chandra Jewellers Ltd.	1993	Plain and studded gold jewellery, cut and polished diamonds	Public Ltd Resident Indian Owned	78 (2)	10 (3)	11.4
Bharat Ratna Jewellers Ltd	1992	Plain and studded gold and silver jewellery	Public Ltd 35% foreign ownership	90 (2)	34 (5)	27.4
Pratap Diamond Jewellers Ltd.	1987	Diamond studded gold jewellery	Private Ltd Resident Indian Owned	102 (1)	53 (5)	34.2
Total				425 (10)	142 (27)	25.0

Note: Figures in the brackets indicate the number of female and male workers interviewed.

Source: Compiled from the central NEPZ data, the company questionnaires and interviews with male and female workers, May 1996-January 1997

Of the six companies only two, Victor Jewellers and Bharat Ratna Jewellers, have part foreign ownership. All the other companies are resident Indian owned. Four of the six - Dimple Jewellers, Victor Jewellers, Chandra Jewellers and Bharat Ratna Jewellers - are public limited companies and their shares have been floated on the stock exchange. Raghav Jewellers and Pratap Diamond Jewellers are private limited companies. The companies have been arranged in Table 4.2 in ascending order of the number of shopfloor workers in machinemade jewellery production. However, this cannot be taken as a representation of the overall size of four of the companies as it does not include the workers in handmade jewellery production.

The proportion of women employed in different companies varies from 11.4 percent in Chandra Jewellers to 34.2 percent in Pratap Diamond Jewellers. The proportion of women in Pratap Diamond Jewellers is particularly high because of a large number of women employed in wax stone studding. The proportions also differ with the extent of automation of the wax injection machines. The more automated the machine the lower is the proportion of women employed. The machines are highly automated in Chandra Jewellers and Raghav Jewellers as compared to Dimple Jewellers. The overall proportion of women in machinemade jewellery production is 25 percent. The different actors in machinemade jewellery production can be categorised broadly into entrepreneurs, managers, and production workers including supervisors. Though I interviewed all the actors in jewellery production the analysis will focus mainly on the shopfloor level production workers including supervisors.

4.3.2 The Production Process

This section discusses the production process of machinemade jewellery. The description of the production process is based on my observations on the shop floor and the interviews with the entrepreneurs, managers and workers. Machinemade jewellery production is different from handmade jewellery production in its scale and in its use of machines. The economies of scale in machinemade jewellery production arise with the replication of a masterpiece made in silver or a base metal. I consider first the process involved in plain jewellery production and then take up the additional processes required for stone studded jewellery.

Masterpiece

The masterpieces form the basis of the mass production of the pieces in gold. The design for the masterpiece is either provided by the foreign buyer or arranged for by the exporter himself. The masterpiece is first made in silver or base metal and then replicated in wax and then in gold, using wax casting and gold casting machines. There is an overlap between machinemade and handmade jewellery production in the making of the masterpiece. However, the tools available to workers to use in master making are much more advanced, some partially mechanised, than those used in handmade jewellery production. In most cases the master makers are Bengali and have had prior experience of working in handmade jewellery production. Master making is considered the most 'skilled' job, and is organised as a separate section in the factory, all the master makers sitting and working together.

Wax Casting

After the masterpiece is made in silver or base metal it has to be cast in wax, as a first stage in the process of obtaining a large number of gold or silver pieces similar to the master. First the master is placed between two pieces of rubber and vulcanised. Vulcanisation involves heating the rubber at high pressure and temperature. After that the rubber, which is now sealed, is cut into two halves with a sharp knife, the master is removed and the pattern of the master remains as a cavity in the rubber. Next the rubber mould is held between two pieces of aluminium and pressed against the wax injector. The wax injector contains molten wax at seventy to eighty degrees centigrade, depending on the quality of the wax. High-pressure air forces the wax into the cavity, where it takes the shape of the masterpiece. The wax pieces are cleaned, and depending on the size of the piece, between fifty to a hundred pieces are soldered on to an iron stand to form a tree shape.

Gold /Silver Casting

After a tree of wax casts has been made, casting in gold or silver takes place. A metal flask is put over the wax tree and some plaster is added to the flask along with distilled water. The flask rotates and the mixture of plaster and distilled water sets at room temperature. The consistency of distilled water and plaster has to be just right, and the setting takes place in a vacuum machine to avoid any bubbles. This process is called the investment cycle. Next the flask is put inside a furnace where the wax will slowly melt and collect in the tray, and then burn out in a ten to twelve hour cycle, different

temperatures being set by a programmer. The temperature in the furnace can vary between 280-730 degrees centigrade in the burn out cycle.

Once the wax burns out, a cavity of the plaster remains. Melted metal is now introduced, in the desired cartages (gold and cadmium for gold jewellery, silver and copper for silver jewellery). The flask is kept over a crucible of melted metal, which rotates and pushes the metal inside the flask with centrifugal force. An exact tree in gold or silver will be formed. This process of gold/silver casting is carried out in a separate section of the factory, generally under management supervision. After casting the tree has to be cut as the pieces are connected to the middle stem, and this is often done in the casting section itself.

Filing

After cutting the pieces are sent to the filing department for hand or machine filing. Then the pieces are put in a barrel which contains water and cutting chips of plastic or ceramic. The automated rotating movements of the barrel smooth the surface of the jewellery pieces as they come in contact with the chips. The production manager decides the exact composition of the chips and water, and the cycle, and workers operate the barrel.

Polishing

Once the pieces are taken out of the barrel they go to the polishing department.

Polishing involves two sub processes, buffing and vibrating. In buffing there are two types of buffs, '*baal* buff' meaning hair buff and '*kapra* buff' meaning cloth buff. '*Baal*

buff' has a hairy surface, which provides the cutting action plus the removal of any holes that are left in the jewellery. The cloth buff helps to give a shine to the surface. These buffs are attached to a rotating motor and the worker holds the piece against the motor. The next step is polishing with the vibrator, the surface of which has small pins to dig into the jewellery and give it a further shine. Plating and packing then follows.

Plating

The jewellery pieces are hung on wires, which are then dipped into ariel gas shampoo in an ultrasonic machine for one or two minutes. The pieces are then manually transferred to a vibrator, which cleans them for a specific time. Next the jewellery pieces are dipped in a tank of plating solution, the main component of which is sulphuric acid, which is pre-set for time and voltage. After plating the jewellery is sent for packing. This completes the process of plain jewellery production.

Packaging

The packaging department in most companies is organised in a separate section of a hall. Before the actual packaging, the jewellery items are stamped with the company stamp and then categorised according to size and weight. Similar items, equivalent in size and weight, are then put in plastic bags, ten in each.

Stone Studding

In the case of studded jewellery, stone setting is done after casting in gold or silver. A hole is made in the jewellery with a hand drill and enlarged with instruments according to

the size of the diamond. Then the diamond is set in the hole and pressure applied to fix it. The diamond is then rotated so that it is covered and held by the metal.

Some companies, such as Pratap Diamond Jewellers, also set diamonds on to the wax piece itself. This process involves fixing the precious stone with glue on to the wax piece in a small channel. The worker has to match the stone size exactly with the channel made, using an eyeglass. The piece is then kept in the setting machine and the heat sets the diamond. After the diamond or precious stone is fixed in the wax mould, the piece is sent for gold casting, and the diamond gets fixed to the gold in the process of casting.

Quality Control

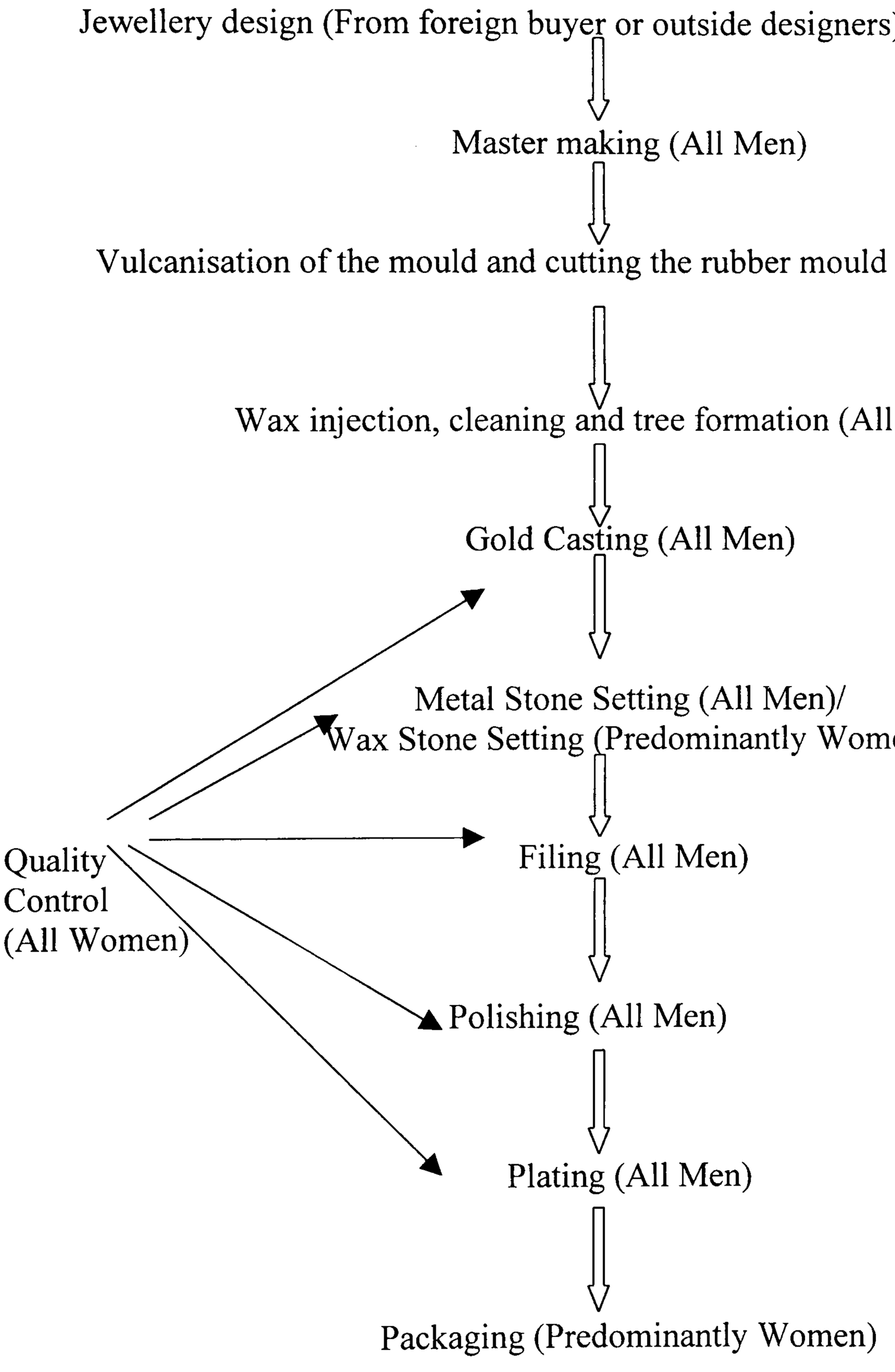
In most of the companies quality control occurs at every stage of the production process after casting. In all the stages of quality control the worker has to check the piece meticulously and has to pay attention to the size of the piece, its completeness, and must check for defects like porosity or any hole in the piece. In later stages the piece has to be checked for the uniformity of the polish, size and symmetry of the stone and the finish. Women are exclusively present in quality control and predominate in the wax and packaging departments.

4.3.3 The Labour Process

Gender division of labour

Figure 4.1 summarises the gender division of labour in the production process just described.

Figure 4.1 Process of Machine Jewellery Production and the Gender Division of Labour

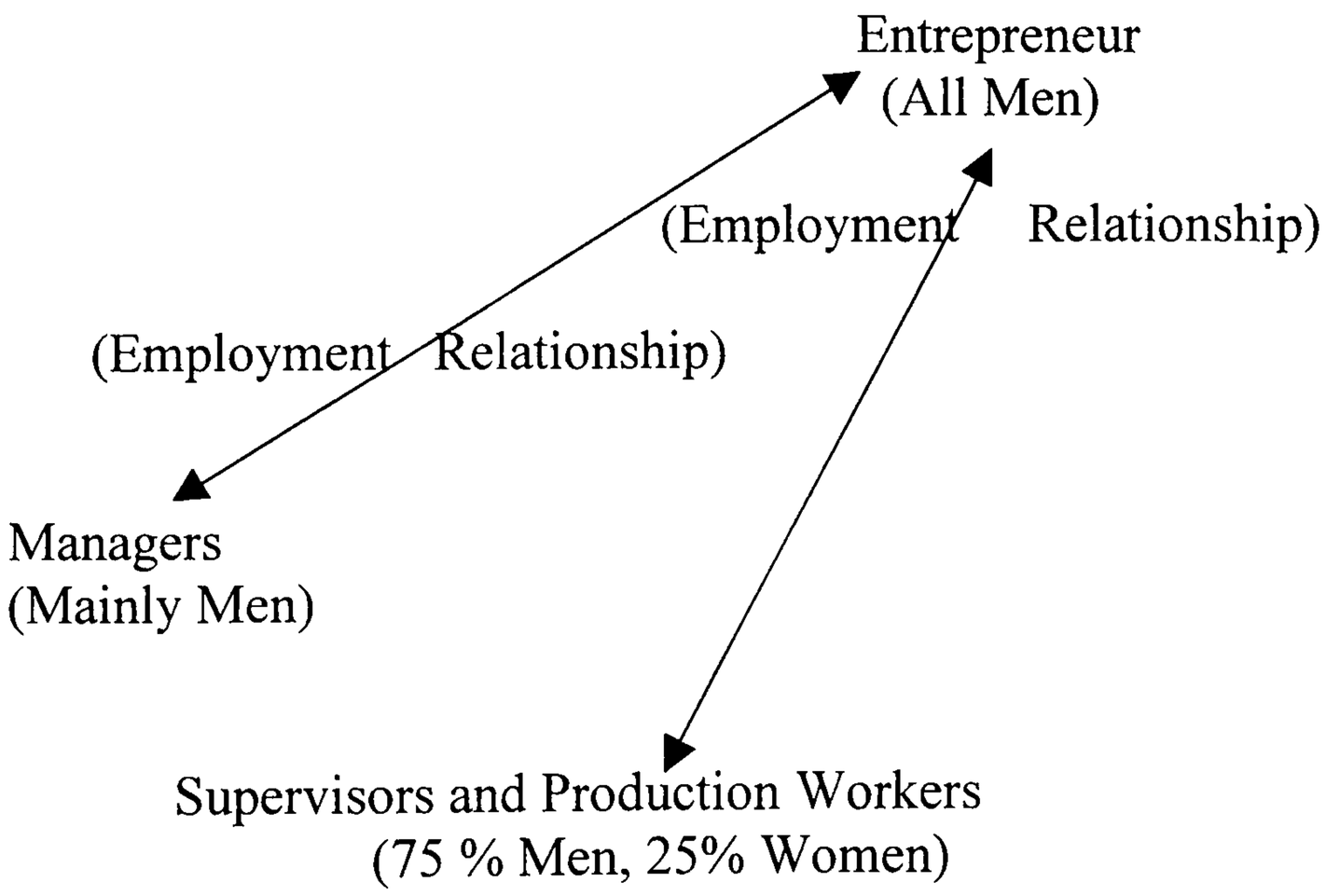


There is an exclusive presence of men in master making, casting, filing, polishing, plating and in metal stone setting. Some women trained in stone setting in Chandra Jewellers had been transferred to wax and quality control departments. Vulcanisation and mould cutting, done in the wax department, has both men and women. Picture 4.1 in Appendix VI shows all male master makers at work and Picture 4.2 in Appendix VI shows women in a wax department, in Bharat Ratna Jewellers.

Production Relations

Machinemade jewellery production is characterised by a capitalist labour process and direct wage employment. In Figure 4.2 I show the production relations in machinemade jewellery.

Figure 4.2 Production Relations in Machinemade Jewellery Production in NEPZ



Demographic Profile

Table A.1 in Appendix II shows the demographic profiles, types of work, methods of selection, training, salaries and other benefits of thirty-seven workers,

twenty-seven women and ten men, who constitute the respondents in my study of machinemade jewellery production in NEPZ. Tables A.1, A.2 and A.3 have been placed in the appendices because of their length.

As Table A.1 shows, the age of female respondents varies between eighteen and thirty. The average age of a female respondent is approximately twenty-three years. The age of the male respondents varies between twenty and thirty-five, with the average being approximately twenty-six years. The education of the female respondents varies between year two to masters level across the sample, with the average around year ten. There is a large variation in the education level of the female respondents across different companies, it being particularly high in Bharat Ratna Jewellers. The education of the male respondents varies between year four to graduation, with the average at year eleven. The variation in education level of male respondents across the different companies is not as striking as it is for the female respondents.

Of the twenty-seven women respondents interviewed, sixteen are married, ten unmarried and one separated. Thus the pattern of mainly unmarried women in export processing zones, noted in the literature (Frobel et al, 1980; Elson and Pearson, 1981; Pearson, 1991; Wolf, 1992), may not be upheld in the case of machinemade jewellery in NEPZ[3]. Nor does there appear to be 'natural' turnover of women after marriage or childbirth. Ten of the women respondents have children and seven have at least one child less than or equal to five years of age. Of the seven respondents with a child of five or under, three had worked in the company since before the child was born.

Of the thirty-seven respondents, twenty-eight are first generation migrants from other states or from other districts of Uttar Pradesh. In Table A.1, migration has been noted only if the worker herself/himself has migrated. In the case of machinemade jewellery production the workers are from a range of different states - Uttar Pradesh, Bihar, Punjab, Madhya Pradesh, Himachal Pradesh, and West Bengal, and in some cases from a different country - Nepal. This shows the importance of migrant labour in the industry.

Recruitment

By formal method of recruitment I mean recruitment through advertisement of the post and a consequent interview. By informal method of recruitment I mean recruitment primarily through a contact in the company and with or without an interview. Eighteen respondents were recruited formally and nineteen informally. In Dimple and Raghav Jewellers all recruitment is made informally, while in Bharat Ratna Jewellers all recruitment is made formally. In the other three companies a combination of formal and informal methods is used.

Wage Levels and Working Conditions

The wage level of the women respondents varies between Rs 1100 per month in Dimple Jewellers to Rs 6000 per month in Bharat Ratna Jewellers. The overall average wage of the women respondents is approximately Rs 2343 per month. However, large inter company variations in the wage levels mean that the overall average is significantly affected by the number of women interviewed in each company. It is important to note that the comparisons made across different companies are suggestive and not conclusive,

for it was not possible to interview at least one type of production worker in each factory because the access to the workers was dependent on entrepreneurs.

The wage level of the male workers varies between Rs 1400 in Victor Jewellers and Rs 4700 per month in Bharat Ratna Jewellers. The overall average wage level of the male respondents is approximately Rs 2771 per month. The average wage level of the men is about eighteen percent higher than that of women.

The standard day of a worker is between 9 a.m. and 5.30 p.m. with a lunch break of half an hour. The working week is six days with Sunday off. Four companies - Raghav Jewellers, Dimple Jewellers, Victor Jewellers and Pratap Diamond Jewellers - resort to measures of overtime work, which is compulsory in all except Diamond Jewellers. Discrimination against women is not so apparent in the wage levels themselves as in policies such as the non-payment of overtime to women in companies like Pratap Diamond Jewellers and Victor Jewellers and the keeping of women as 'permanently casual' workers in Dimple Jewellers. For a full day of overtime all the workers, male and female, are paid the equivalent of one day's wage. This is in contravention of the legal provision to pay a double rate for overtime work.

In Table 4.3, I show the average wage level for the female respondents in different companies. The average wage of the male respondents in different companies is not taken up, as the number of male respondents is too low. There are wide differences in the wage levels of the women respondents across the different companies. The lowest paid

respondents are in Dimple and the highest paid in Bharat Ratna Jewellers. There are no women respondents who are supervisors in Dimple Jewellers. Dimple Jewellers has the poorest work conditions and labour relations. It follows a policy of recruiting workers through informal contacts and even the people in the management cadre are related to each other. Most of the women workers in Dimple Jewellers have primary or secondary level education only. One of the methods of discrimination Dimple Jewellers uses is to keep the majority of women as 'permanently casual' workers in the company, at very low wage rates. These workers are not issued any appointment letter and their gate pass is made anew every two months. The company does not make any provident fund (PF)[4] or Employee State Insurance (ESI)[5] contributions for these workers and does not provide them with any earned leave (EL)[6], or maternity leave (ML)[7]. In contrast, however, none of the male workers interviewed are on casual contract here.

Raghav Jewellers has the second lowest average salary level for women workers after Dimple Jewellers. Most of the women workers in Raghav Jewellers have education around high school level. The recruitment is predominantly done informally. Just as in the case of Dimple Jewellers, the women workers are continually employed on a casual basis. However, unlike Dimple Jewellers, where none of the male workers interviewed are on casual contracts, here all male workers are also on casual contracts.

The average salary of a woman respondent in Victor Jewellers is Rs 1647 per month. Most of the workers receive PF and ESI benefits. However, none of them have a letter stating that they are permanent workers.

Table 4.3 Average Monthly Wages of Women Respondents by Company

Name of the Company	Average monthly wage level of women respondents (in Rs)	Number of women respondents
Dimple Jewellers Ltd.	1318	6
Raghav Jewellers Ltd.	1420	5
Victor Jeweller Ltd.	1647	3
Pratap Diamond Jewellers Ltd.	1960	5
Chandra Jewellers Ltd.	2300	3
Bharat Ratna Jewellers Ltd.	5320	5
Total	2343 (overall average)	27

Source: Based on interviews with the workers, January 1996-May 1997

A similar situation prevails among respondents in Pratap Diamond Jewellers and Chandra Jewellers, where many workers who are getting PF and ESI deducted do not have any appointment letter. Two of the three women workers interviewed in Victor Jewellers expressed dissatisfaction with their work. Mansi, who is in packaging inspection, complained that she is made to work after office hours and is not paid any overtime. She also said that male workers who work overtime do get extra payment for the same. This is thus an alleged case of open discrimination against women.

Pratap Diamond Jewellers employs large numbers of women as trainees in wax stone setting. Many of these women are taken on as trainees at very low wage levels and then

their employment is terminated within three months, on the plea that they have not learnt the work well. A fresh group of women trainees is then taken on.

In Chandra Jewellers the average wage level of a woman worker is Rs 2300 per month and all the women workers interviewed are getting PF, ESI, and EL. The wage levels of the women respondents are not necessarily less than those of men. In fact the wages of Roopa Kanodia, the wax department supervisor, is the highest amongst all the workers of both sexes who were interviewed. However, the company maintains a strict policy of gender segregated labour.

Bharat Ratna Jewellers has the highest average wage levels at Rs 5320 per month. The education level of the women workers is one of the highest among all the companies and some of the women are in the upper echelons of the labour hierarchy working as supervisors. Almost all the workers, women and men, reported job satisfaction and good relations with the management. Most of the recruitment takes place through formal interviews although a few workers had secured their jobs through personal contacts.

Workers in machine jewellery production have often worked before in other industries, such as toys or garments in the case of women and rubber belts or plastics in the case of men. Employment in machine jewellery production is similar to employment in any other sector of mechanised production.

Training

As regards training, workers interpreted it in different ways. There is no formal training requirement in any company for wax injection, cleaning and tree formation, in which women predominated. Alka, at Dimple Jewellers, perceived her training period to be only a day or two, whereas Purnima in the same company said training continued for six months until she perfected all aspects of the work. Both of them are working on cleaning of the wax pieces. There is little formal training given to women in quality control and packaging.

In the case of plating and polishing there is little in the nature of a fixed period of training. The period of training shown in Table A.1 is the training received in the company in which the worker is presently employed, unless mentioned otherwise. This period would vary with the experience of the worker in previous jobs. It is also important to note here that for male workers in master making the training received is in most cases in the handmade jewellery workshops. The experience of working in a handmade jewellery workshop is the main grounding for work as master makers in machine jewellery production, so for most master makers there is little need for training in the company of employment. Thus for Tapas Mandal of Victor Jewellers, who has experience of working in handmade jewellery, master making required two months to learn, whereas for Kamal Singh who was recruited afresh into master making, the training period was one year. I noted formal training being imparted in only two instances. One is the case of metal stone studding in Chandra Jewellers and the other is the case of wax stone studding in Pratap Diamond Jewellers. A detailed analysis of these

cases will be taken up in Chapters 5 and 6.

4.4 HANDMADE JEWELLERY PRODUCTION IN NEPZ AND DELHI

My research into handmade jewellery production in NEPZ and Delhi has mainly concentrated on plain jewellery[8] production. Though NEPZ and Delhi are different in that the former caters to the export market and the latter to both the domestic and the export market, the labour and production process in the two sites is the same in essence and there is considerable mobility of artisans between the two sites. In some cases, there is a common contractor for units with common ownership in Delhi and Noida.

However, there are two important differences between handmade jewellery production in the zone and in Delhi. The first relates to the gender composition of the two sites, in that there is a marginal presence of women as unpaid family workers in Delhi in contrast to their total absence in NEPZ. This difference between the two sites will be a resource for analysis in the subsequent chapters. The second relates to the spatial organisation of production. There are restrictions on the movement of gold into and from the zone, imposed by the Government of Uttar Pradesh. These restrictions are to avoid pilferage of gold from the zone, which is available on easier terms from MMTC, into the domestic markets. Such restrictions mean processing of gold has to take place in the factory premises in the zone, where most of the artisans and employees work and reside. On the other hand, gold processing in Delhi can take place in a number of workshops as the

entrepreneurs have the freedom to get the gold processed from many more contractors, and have greater choice in using the diverse skills of the artisans or employees.

4.4.1 Company Profiles

In Tables 4.4 and 4.5 I present the profiles of companies in handmade jewellery production in NEPZ and Delhi. The companies have been arranged in ascending order of the number of artisans and employees. Of the thirteen companies only one, Precious Jewellers, has foreign equity. All the other companies are resident Indian owned. As can be noted from Table 4.4, seven units have common ownership in Delhi. Nutan and Sameer Jewellers, though shown as separate units on paper for tax purposes, one in the name of Mr Jain and the other in the name of his wife, have a common factory workshop in NEPZ. The number of contractors shown in Table 4.4 and 4.5 represent the contractors working for the company at the time of the interviews.

Many contractors work for more than one company across NEPZ and Delhi. While the artisans, employees, child/young workers attached to different contractors reside in the common premises of the factory workshop in NEPZ, each contractor has a separate workshop, in most cases adjacent to their domestic space in Delhi. In the case of common ownership, the Delhi units were set up before the units in the zone and in all the cases the entrepreneurs said that they were attracted to start a unit in the zone because of the special facilities offered there, especially the easy availability of gold.

Table 4.4 A Profile of the Sample Companies in Handmade Jewellery Production in NEPZ

Name of the Units in NEPZ	Name of the Unit/s in Delhi with Common Ownership	Date of Incorporation in the Zone	Nature of Production in NEPZ	Ownership Type	Number of Contract ors	Total Number of Artisans and Employees
Parimal Jewellers	Panna Jewellers	1993	Handmade plain gold jewellery	Partnership, Resident Indian owned	1	20
Girilal Exports	Girilal Jewellers	1990	Handmade plain gold jewellery	Sole Proprietorship, Resident Indian owned	3	50
Sudesh Jewellers		1996	Handmade plain gold jewellery	Sole Proprietorship, Resident Indian owned	6	50
Nutan Jewellers	Naveen Jewellers	1993	Handmade plain gold jewellery	Private Ltd, Resident Indian owned.	3	54
Sameer Jewellers		1994	Handmade plain gold jewellery	Sole Proprietorship, Resident Indian owned		
Glitter Jewellers		1992	Handmade plain gold jewellery	Private Limited, Resident Indian owned	3	60
Sudhim Jewellers	Sharma Jewellers	1992	Handmade plain and studded gold jewellery	Partnership, Resident Indian owned	3	60
Kaushik Jewellers	Karin Jewellers	1992	Handmade plain gold jewellery	Partnership, Resident Indian owned	2	60
Salil International		1990	Handmade plain gold jewellery	Partnership, Resident Indian owned	5	80
Kinarilal Exports	Kunal Jewellers	1996	Handmade plain gold jewellery	Private Ltd, Resident Indian Owned	10	100
ML Jewellers		1990	Handmade plain gold jewellery	Partnership, Resident Indian owned	5	100
Bharat Exports	Bharat Jewellers	1991	Handmade plain gold jewellery	Partnership, Resident Indian owned	10	200
Precious Jewellers		1992	Handmade plain and studded gold jewellery	Partnership, 70% Indian and 30% NRI owned	20	250
Total					68	1084

Source: Based on the survey and interviews carried out with the entrepreneurs, May 1996-January 1997

Table 4.5 A Profile of the Sample Companies in Handmade Jewellery Production in Delhi

Name of the Units in Delhi	Date of Incorporation in Delhi	Nature of Production in Delhi	Ownership Type	Number of Contractors	Total number of Artisans and Employees
Naveen Jewellers	1990	Handmade plain gold jewellery	Sole Proprietorship Resident Indian owned	3	70
Girilal Jewellers	1990	Handmade plain gold jewellery	Sole Proprietorship Resident Indian owned	4	70
Panna Jewellers	1976	Handmade plain gold jewellery	Partnership, Resident Indian owned	5	100
Karin Jewellers	1990	Handmade plain gold jewellery	Partnership, Resident Indian owned	8	120
Kunal Jewellers	1880	Handmade plain gold jewellery	Partnership, Resident Indian owned	10	120
Sharma Jewellers	1990	Handmade plain gold jewellery	Partnership, Resident Indian owned	5	200
Bharat Jewellers	1980	Handmade plain gold jewellery	Partnership, Resident Indian owned	10	250
Total				45	930

Source: Based on the survey and interviews carried out with the entrepreneurs, May 1996-January 1997

The Tables here do not include the male child/young workers working in the unit, as the entrepreneurs did not provide figures for these.

Although I have no figures for child/young workers, through observing the production process and by talking to the male artisans I found that on average the number of male child/young workers is the same as the number of male adult artisans and employees, with an average of one child or young worker assisting one adult artisan or employee.

The hidden women working as unpaid family worker are also not shown in the Table as their relative invisibility makes quantification difficult.

The main actors in handmade jewellery production are entrepreneurs, contractors, artisans, employees, child/young workers - all of whom are male - and a few women as unpaid family workers who are only present in Delhi and not in NEPZ. I use the term artisans here for those working on a piece rate basis and employees for those working on a fixed wage basis.

4.4.2 The Production Process

This description of the production process for plain jewellery is based on the interviews with the entrepreneurs, contractors, artisans, and employees as well as my observations of the production process. One of the major differences between machinemade and handmade jewellery production is that whereas in machinemade jewellery production one design made as a masterpiece is used to manufacture several pieces of jewellery, in handmade jewellery production each piece of jewellery is made individually.

First gold is melted in a furnace along with other alloys like cadmium, according to the cartage required. Second a thick strip of gold is drawn from a hand-operated machine called the rolling mill, by inserting blocks of gold through the wheels of the machine and rotating it. This strip of gold is then thinned into a wire with a drawing plate called *jantri*. The gold wire is next held against a blowlamp to make small pieces of gold called *raizi*.

The third stage is to set the pieces of gold on wax, with cadmium, using tweezers, according to the design required. Each artisan/employee has a copy of the design on paper when doing the setting. For some jewellery items, such as certain types of necklaces, a woven chain is set on the sides of the necklace. The process of production of these gold chains is the same as the silver chains and will be discussed in the next section.

Thereafter plaster of paris and water are applied to the jewellery, set on the wax and left to dry and harden. This is done to keep the jewellery in shape for the next stage of soldering when the wax melts. After soldering the plaster of paris is removed and a jewellery piece, either a necklace, ring or earring, is now ready in its raw form. All the processes described, from mixing of gold to soldering, are done in the same workshop. However, there are different artisans and employees involved in the processes which follow soldering, that is *meena* or enamel work, polishing and edging, who may or may not be present in the same workshop in Delhi. If they are not present, the jewellery is taken to the workshops, and piece payment made for these processes. However, as mentioned earlier all artisans and employees working for an entrepreneur in NEPZ reside in the same workshop. Enamel work involves mixing different colours in water and then applying them to the jewellery piece with a brush. The jewellery is then heated. Polishing involves heating the jewellery piece three times in a furnace called a *bhatti*, to give it a black colour. The jewellery piece is next dipped in acid. It is then heated again, after which it is cleaned with a brush and finally it is dipped in water with gold colour. Figure 4.3 shows the production process and age division of labour of handmade jewellery.

Figure 4.3 Process of Plain Handmade Jewellery Production and the Age Division of Labour (All Males)

Gold and cadmium mixed and melted in a large furnace (Men and Boys)

↓

Gold wire drawn from gold in a drawing machine (Men and Boys)

↓

Small balls of gold made from gold wire (Predominantly Boys)

↓

Small balls of gold set on the wax according to the design of the jewellery piece (gold chain attached to some necklaces) (Predominantly Men)

↓

Soldering of the jewellery piece (Predominantly Men)

↓

Enamel work done on the jewellery (optional)(Men and Boys)

↓

Polishing (Men and Boys)

↓

Edging (Men and Boys)

Though both adult men and boys were involved in all the processes, boys were predominant in making small balls of gold as that work was considered unskilled. Jewellery setting and soldering was considered skilled and was dominated by adult men.

4.4.3 The Labour Process

One's initial expectation might be that production in the zone would be centralised and labour employed on formal contract arrangements; indeed the employment statistics returned from the units would support this, showing the artisans as directly employed by the company. However, closer scrutiny reveals widespread informal labour practices.

Kinship Networks, Subcontracting and Male Child/young Workers

My research on plain handmade jewellery production shows that most of the male artisans and child/young workers are migrants from a far away district of West Bengal, Medinipur. In Map 1 one can note the long distance between Medinipur and Delhi/NEPZ, more than 1300 kilometres. A closed, informal labour market recruits long distance on the basis of kinship networks, and excludes women almost completely from visible production. As mentioned before, some women are incorporated marginally as unpaid family workers in some Delhi units. Contracting/subcontracting and the wide prevalence of male child/young workers characterise this complex labour process.

In polishing, there is a concentration of Muslim artisans from Hugly district of West Bengal, but since for every artisan in polishing there are twenty artisans in jewellery setting, the proportion of the artisans from Hugly is very small in comparison to the artisans from Medinipur. Some of the migrant artisans have worked as child/young workers in silver jewellery workshops in the villages.

One important aspect of the labour process in handmade jewellery manufacture is the contracting out system. In all the handmade jewellery factories/workshops in the zone, and in Delhi, the entrepreneurs recruit one or more male contractor/s who is/are paid on the basis of each gram of gold processed. Each contractor is responsible for the production of jewellery and recruits male artisans and employees who are known to him, through the kinship network. In some cases the contractor may himself be involved in production. Kinship networks become especially important in recruitment because of the high value of gold and the need for the contractor to trust the recruit. Recruits are either employees paid a fixed wage, or taken on as artisans and paid on the basis of per gram of gold processed. Each artisan and employee has one or two 'helpers', who are the child/young workers. The 'helpers' are not paid anything, but are given food and some basic clothing. The artisans working on a per gram basis bear the food expenditure of the child/young workers working with them, while the expenditure for the child/young workers working with the employees is borne by the contractor. A perpetuation of child labour through kinship and personal relationships is also noted in other studies (Goddard and White, 1982). The kinship networks serve to hide the exploitation in the system. Poverty, coupled with lack of employment avenues in the villages, is the propelling force on the supply side of child/young workers.

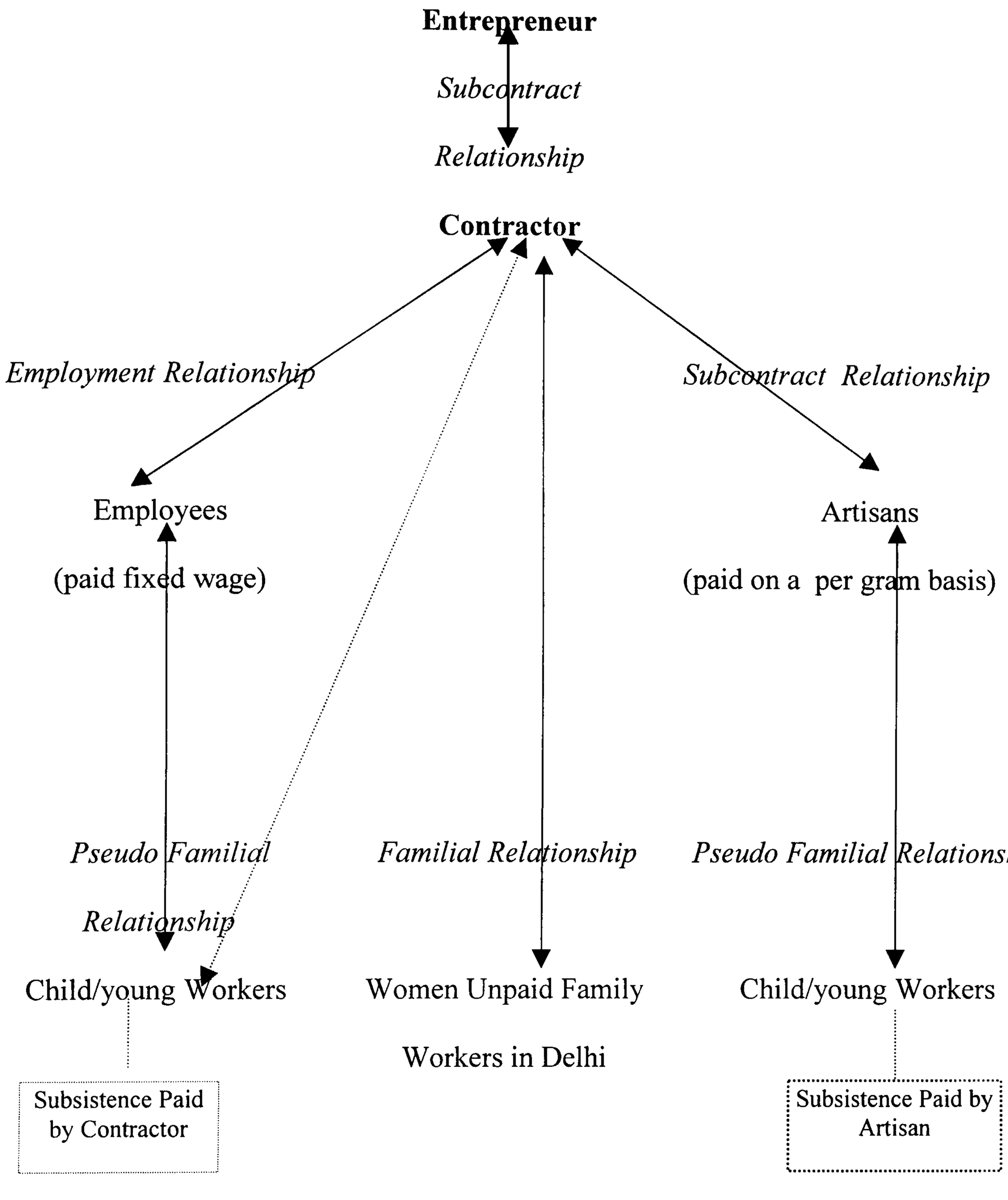
Child/young workers undergo a long and difficult period of apprenticeship before they are paid anything. As 'helpers' they not only help the adult artisan, but in most cases also do the cooking, grocery shopping, and run errands for the adult artisans. This prolongs their apprenticeship period, as does the widespread practice of restricting access to

certain jobs in the work process, so that the whole process is not grasped too quickly. From the above section one can conclude that handmade jewellery production in NEPZ is characterised by informal labour relations. Kinship, real and fictive, plays a key role in the migration of artisans from the villages of West Bengal and their induction into the workshops in Delhi and NEPZ. The wide prevalence of subcontracting provides the jewellers with a completely flexible work force, who are available to work for inhumanely long hours in times of peak demand and can be dispensed with in slack demand. The artisans have little flexibility in their hours of work and work for fourteen hours on average, with no leisure or family life.

The production relations in handmade jewellery for NEPZ and Delhi are summarised in Figure 4.4. There are a mixture of production relationships, including some capitalist employment relationships, some precapitalist self-employed artisanal subcontracting relationships, and some unpaid gendered familial production relationships.

As indicated, entrepreneurs in the zone show the employment of artisans as direct wage employment in the records, to avoid tax deduction at source. Other restrictions on contracting labour, like the requirement of obtaining a license from the licensing officer by contractors employing twenty or more workers, and a registration certificate by the principal employer of the establishment, are not fulfilled by any of the establishments manufacturing handmade jewellery in the zone.

Figure 4.4 Production Relations in Handmade Jewellery Production in NEPZ and Delhi



Demographic Profile

Table A.2 in Appendix III shows the wage structure and demographic profiles of the thirty-two adult contractors, artisans and employees and seven child/young workers who formed my sample of handmade jewellery producers in NEPZ and Delhi. The artisans

and employees have been categorised according to the factories/workshops they are attached to. The women who are unpaid family workers are not taken up in Table A.2 because except for Sona, who is the wife of Sudesh and can be categorised under Bharat and Sharma Jewellers, none of the other three women work for the listed companies. As mentioned in Chapter 3, they represent the marginal hidden labour in Delhi, and are represented in my study as a purposive sample.

The contractors in many cases have complex linkages, catering to many different companies in Delhi, NEPZ or both. For example, the contractor Sudesh also has some artisans working for him in Bharat Exports in the zone. The entire complex inter connections have not been shown in the Table for clarity of presentation. As indicated in Chapter 3, the focus of the study is on four factory workshops in NEPZ and two workshops in Delhi, where repeated visits were made.

The ages of the child/young workers ran between thirteen and eighteen and those of the adult artisans and employees between nineteen and thirty-three years. The average age of the child/young workers is around seventeen and that of the adult artisans/employees around twenty-three. The ages of the contractors in the sample vary between twenty-three and thirty-four. The age of the adult artisans/employees at the point of migration can vary between ten and twenty-two years.

The education of the child/young workers, artisans and contractors varies between none to A level. The majority of child/young workers, artisans and contractors have primary

level education. All child/young workers are unmarried. Of the twenty-six artisans and employees, only five are married and twenty-one are unmarried. Of the six contractors, three are married and three unmarried.

Workshop Labour Conditions

My visits to the factory workshops in NEPZ and to the workshops in Delhi show that the artisans and employees work in unhygienic and unsafe conditions. Long and uncertain hours of work, coupled with the difficulties of affording rented accommodation, lead most of the artisans and employees to reside in the workshop itself. In NEPZ the factory workshop is rented by the entrepreneur and all the artisans who may be tied to different contractors, whether working on a piece rate or fixed wage basis, reside in the factory premises.

In Delhi the workshops are rented or bought by the contractors and in many cases are an extension of their houses. Here all the artisans and employees tied to one contractor reside in his workshop. Twenty-five artisans, employees and trainees work, eat, and sleep on the floor in the same hall, and the fumes of the gas used for soldering fill the hall. All the artisans share a common toilet and bathroom. On average the artisans, employees and trainees work from 8 a.m. to 12 p.m. at night, stopping only for lunch and dinner. The labour process here closely resembles the one described by Cockburn (1983) in the case of the printing industry in Britain in 'the pre capitalist days' of 1557. The printing was organised in workshops adjacent to the master's home into which boys were inducted and from where the girls and women were largely excluded. As Cockburn (1983) writes:

> The apprenticeship contract is a paradigm of the unity of home and work in a fully patriarchal and pre-capitalist world...
> The boy left his own home and went to live under the roof of his master who then, in loco parentis, fed and clothed him (often scantily) and was held responsible for his misdemeanours (ibid: 15).

The artisans, employees and trainees normally have evenings off only on a Sunday, so that the total hours of work in a week amount to ninety-one, on average. They have no time for leisure or family life. They work near fire, without fans and many suffer from eye and lung problems in the long run. Over the years some artisans become contractors, while others may return to their village. Picture 4.3 in Appendix VI shows the workshop of Nikhilesh (introduced in Chapter 3 as a key informant) in Raigerpura, Delhi, with all male artisans and employees.

Wage Structure and Margins

As indicated the child/young workers are provided only with subsistence, mainly in kind. For employees the wage level varies between Rs 1000 and Rs 3000 plus food. The payment to artisans working on a piece rate basis can vary between Rs 6 and Rs 14 per gram of gold processed. Table A.2 shows that the net margin of the piece rate artisans can vary between Rs 1800 and Rs 5000 per month over and above food. There are variations in the rate of payment to the fixed wage artisans across and within a workshop. The polishers and cutters are paid in gold itself. Moreover, the contractors who receive larger payments per gram are not necessarily paying their artisans a larger margin. The payment to the contractors varies between Rs 14-22 per gram of gold processed.

Most artisans have worked on a fixed wage before they negotiate for output based payment from the contractors. However, there are a few who prefer to continue to work on a fixed wage basis to avoid fluctuations in income. In periods of slump it is the artisans who are without work in the first instance. However, in case of a severe shortage of work the employees are also without work. In such a situation they get extra wages for one to two months, but have to return to the village or seek alternative employment after two months.

The artisans and employees in Delhi get an additional one percent of gold, to cover the loss of gold in the process of manufacture. However, they said that many times they are able to reduce the loss of gold to below one percent, which is an advantage of working in Delhi. Restrictions on the movement of gold mean that no extra is given in NEPZ. The stipulated minimum wage for a skilled worker in 1994-5 applicable for NEPZ was Rs 1500 per month. Though in most cases the monthly wage of the adult artisans exceeds the stipulated minimum, they do not enjoy the benefits of being a permanent employee, and have to work long hours, in sub-human conditions to earn the same. It is in this overall context that male labour can be considered as very 'cheap' here.

The people who migrate from the village maintain close contacts with the village community, to further their future interests. These networks help them in getting labour later in case they open up a workshop of their own.

Women in Handmade Jewellery Production in Delhi

I was able to trace four women engaged in handmade jewellery production in Delhi, the presence of whom was denied by many male artisans. I present in Table 4.6 the demographic profile and the nature of involvement in jewellery work of the four women unpaid family workers. As can be seen from the Table the ages of the women vary from 27 to 45, education from year 7 to 'A' levels and family income from Rs 3500 to Rs 16000.

Of the four women homeworkers, only Suneet interacts in the market, gets the orders for the workshop, supervises the artisans, and gets the work done from other workshops if necessary. The other three, Sona, Punita, and Shobha, work from the confines of their house. All of them described their work as 'helping' their husbands and two of them, Sona and Punita, have given up jewellery making themselves, though they continue to be involved in supervision of the artisans.

The incorporation of these women into handmade jewellery production conforms with the ideology of seclusion[9] in three of the four cases, but poses a challenge to this ideology in the case of Suneet. In all the four cases the women migrated to the city to join their husband. In three of the four cases women were involved in chain weaving and did not know soldering or set making. However, Punita represents a unique case, crossing the rigid boundaries of the gender division of labour by working in jewellery set making and soldering. In none of the cases do women sit with the male artisans in the workshop. Even Punita has learnt set making from her husband.

Table 4.6 Demographic Profile and Nature of Work Involvement of Unpaid Women Family Workers in Delhi

Name	Age	Education	Number and Age of Children	Family Income (per month)	Nature of Past and Present Involvement in Jewellery Work
Shobha	42	Year 8	4 (18, 16, 14, 11)	Rs 3500-4500	Chain weaving in the past and at present
Punita	32	Year 7	2 (12, 10)	Rs.4000-5000	Jewellery set making in the past, supervising artisans intermittently at present
Suneet	45	Year 8	2 (22, 9)	Rs 9000-1100	Actively involved in contracting work, getting orders, supervising artisans etc. now and in the past. Did some chain weaving in the past
Sona	27	A levels	2 (8, 4)	Rs 10,000-15000	Chain weaving in the past, supervising artisans intermittently now

Source: Based on interviews with the women homeworkers in Delhi, in the course of my fieldwork, May 1996-Jan 1997

I will next take up two case studies - one of a male artisan in NEPZ and the other of a woman artisan who is working as an unpaid family worker in Delhi - to shed light on the complexities of the labour process in handmade jewellery production.

Case Study 1: Based on the interview with Kirti on 27 September 1996 in the workshop of the contractor Tapas in Raigerpura, Delhi working for Naveen Jewellers.

Kirti is a twenty-three year old artisan who migrated to Delhi seven years ago from the village of Sitapur in the Medinipur District of West Bengal. Mani, his neighbour from the village who is working in one of the workshops of handmade jewellery in Delhi, brought him to Delhi. Kirti said that he thought of Mani as his elder brother. Kirti comes from an agricultural background, and his family owns a small plot of land where his parents engage in subsistence agricultural production. However, the produce from the land is not enough to feed the family and his father also has a small shop of *bidi* (a cheap substitute for cigarettes).

Kirti has studied up to year five. He wanted to study further but did not have the resources to do so. He was engaged in a silver jewellery workshop on a part time basis in the village for one year prior to his migration, learning silver chain soldering and finishing work. He was required to undergo two years of training in Delhi for making gold jewellery sets. He was initially employed in the same workshop as Mani. For two years he was not paid anything and was given only food. After that he was made independent and was paid Rs 600 per month plus food for a year. He worked in the same workshop for five years. His wages increased to Rs 1200 per month after a year and a half and then he shifted to working on a per gram basis. He was getting paid at the rate of Rs 7 per gram of gold processed. He used to make around Rs 1500 per month over and above his own food expenditure and the subsistence expenditure of the child worker assisting him. However, due to the unavailability of work he shifted to the present workshop where he has been working for two years. He now works as a piece rate artisan in Tapan's workshop and is paid at the rate of Rs 8 per gram of gold processed. He has one young worker Asim who is a trainee under him. Asim is eighteen years old and was brought by Tapan one year ago from the village, where they were neighbours. Kirti is able to make between Rs 2000-Rs 2500 per month over and above the expenditure of Rs 400 incurred on his food and Rs 600 for the subsistence expenditure of Asim.

Kirti works from 8 a.m. in the morning up to 12 p.m. at night, getting up intermittently only for meals. He works even on a Sunday, taking a break of only an hour or two sometimes. He does not like his work, but thinks that he has little other option. Kirti regularly sends large parts of his salary to his parents in the village and also visits his village once or twice in a year. Regarding his future plans he thinks he will continue to stay in Delhi if he has the opportunity to do so and if he has enough savings to buy a house.

The above case study of Kirti highlights the importance of fictive kinship ties in the process of migration from the village to the city. It also shows the mobility of the workers between the workshops: Kirti seeks to improve his economic conditions albeit in a

constrained situation. The shift that the case study highlights between the alternative wage systems, fixed and output based, are typical, as are the long hours of work and apprenticeship requirements.

I now present the case study of Sona, as an illustration of an unpaid family worker.

Case Study 2: Based on an interview with Sona in August 1996 at her home in Raigerpura, Delhi

Sona is twenty-seven years old and has been married for ten years. She is educated up to class 12 (equivalent to GCSE). She has two children, an eight-year-old son and a four-year-old daughter. Sona's father is a farmer and also operates a rice-husking machine. Sona used to weave silver chains before marriage. She had learnt chain weaving by observing other women in the village do it. She said she used to weave the chain along with study and would keep the money as a 'pocket allowance'. She said that only in cases where the parents are very poor do they use the money earned by their daughters for household expenditure.

Sona belongs to Mahrajpur village and is married to Sudesh from Mahabatpur village. Both the villages are in Medinipur district of West Bengal. She has two brothers and two sisters. Her husband Sudesh had migrated to Delhi sixteen years ago. He worked in a workshop for six years and then started his own contracting business in 1986. Sona migrated to Delhi after her marriage to join her husband. Sudesh was a small contractor at the time and had two artisans working with him. Sona used to weave gold chain in the initial two years of their marriage. According to Sona, this was to help her husband, as their financial position was not very good at the time. Sudesh used to earn Rs.3000 per month. Now she supervises the artisans in her husband's absence. She said that the artisans listen to her orders better than those of the manager.

One of her brothers is in Delhi and is the supervisor in one of the jewellery units in the zone, where her husband Sudesh also has a contract. The business is in the joint name of Sudesh and Sona. They have a joint income between Rs 10000 and Rs 15000 per month. On the question of decision making, Sona said Sudesh took decisions about the allocation of money between expenditure and saving. However, they manage the daily expenditure together. She added that her husband and she did not have any personal expenditure. Decisions about other major expenditures and issues like children's education are taken together. She felt that her position in the house has not changed since she has given up chain weaving.

Sona shows some signs of independence as she is involved in learning music and sings on All India Radio. She is studying for a Bachelor's degree in Music. Her daily schedule is as follows: She first gets up, feeds her children and sends them to school. After that she practices music for one and half-hours, she then cleans the house, washes and cooks. Then she feeds her children after their return from school and puts them off to sleep. After that she takes some rest, teaches her children, sends them for tuition, practices music, cooks and goes to sleep. Sudesh helps her in getting the children ready in the morning. She is intermittently involved in supervision of the artisans on certain days.

Sona's case study reveals that she knew chain weaving before marriage and continued to weave after marriage to 'help' her husband. She enjoyed complete control over her income before marriage, which was designated as a 'pocket allowance', but later she did not interact in the market directly and Sudesh received the payment for her work. However, the business is in their joint names due to tax considerations. An interesting aspect of the case study is that Sona's engagement with chain work alters as part of a strategy of accumulation and class mobility. Her involvement or non-involvement in chain weaving does not affect her position in the house.

The recruitment of Sona's brother as supervisor in one of the units where Sudesh is a contractor shows the importance of kinship in the induction of male artisans in handmade jewellery production, as indicated before. The hidden unpaid nature of the work which women do leads women workers themselves to conceptualise it as 'help' to their husbands. I will go into an analysis of this in the next chapter. At this point I take up the third site of handmade jewellery production, namely the villages of Medinipur.

4.5 CHAIN PRODUCTION IN THE VILLAGES OF MEDINIPUR

My visit to the Medinipur district of West Bengal was in response to the large numbers of male migrants in handmade jewellery production in Delhi and NEPZ from Medinipur, and also in search of the 'hidden' women engaged in jewellery production. My study of jewellery production in Medinipur was spread over three villages: Panna, Mahabatpur and Sagarpur. The major jewellery items produced in the three villages are different varieties of silver chains. The central point for the supply of silver and the return of the silver chains is Calcutta. These silver chains are then supplied by the wholesalers in Calcutta to the retail markets all over India.

Most of the households in the villages of Medinipur are engaged in subsistence level agriculture. Chain production is especially popular in Panna village, as it is a flood prone area, with an average of one crop in a year. In contrast to the handmade jewellery production in Delhi and NEPZ, there is a majority of women working in the sector as homeworkers, engaged in the weaving of silver chains. However, the male artisans in Delhi as well as in Medinipur largely denied the presence of these women. The major actors in silver jewellery production are the entrepreneurs in Calcutta, the village contractors, the employees, the artisan/subcontractors, the child/young workers - all of whom are male - and the women homeworkers and unpaid family workers. The employees here are the daily wage workers employed by contractors. The artisans/subcontractors here are the self employed men who are paid on a per gram basis by the contractors. I call them artisans/subcontractors because, unlike in Delhi and NEPZ,

they have their own workshops and many are involved in subcontracting chain weaving work to the women homeworkers. Next I take up the process of production and the gender and age division of labour in chain production.

4.5.1 The Production Process

First the village contractor buys silver from Calcutta. The mixing and drawing is done in adjacent towns like Ghatal and Daspur, subcontracted out by the village contractor, or in the market area of Sagarpur. I visited one of the workshops in the market area of Sagarpur where the mixing of metals and the drawing of wire is undertaken. The contractor pays a fixed rate of Rs.16 per kilogram to the shop owner for carrying out these operations. Silver is mixed with cadmium to the required purity by melting the metals in a furnace. From this mixed metal thick wires are drawn from the wiring machine.

The thick wires are then supplied by the contractor to the village artisans/ subcontractors. The subcontractor, who is also an artisan, has a small workshop adjacent to his home where two or three boys and men work along with him. In this workshop the male artisans thin the thick wire and draw it out according to the size of the chain. For example, to get a twenty-inch chain, a seventy-two inch wire will be drawn out. The male artisans next cut the wire into small half to one inch pieces with a *katri* or a cutter. For 'english chain' they then round the pieces in the rounding machine and these pieces are supplied to the women homeworkers to be woven as chain. For another popular variety of

chain in Panna called 'gote chain', the rounding is done manually by women. The weaving involves opening the rounded wire, interlocking it with another rounded piece of wire, and then closing the piece. This work is done with pliers and involves detailed concentration and repetition to make the chain. Picture 4.4 in Appendix VI shows a woman engaged in chain weaving in her home in village Panna, Medinipur.

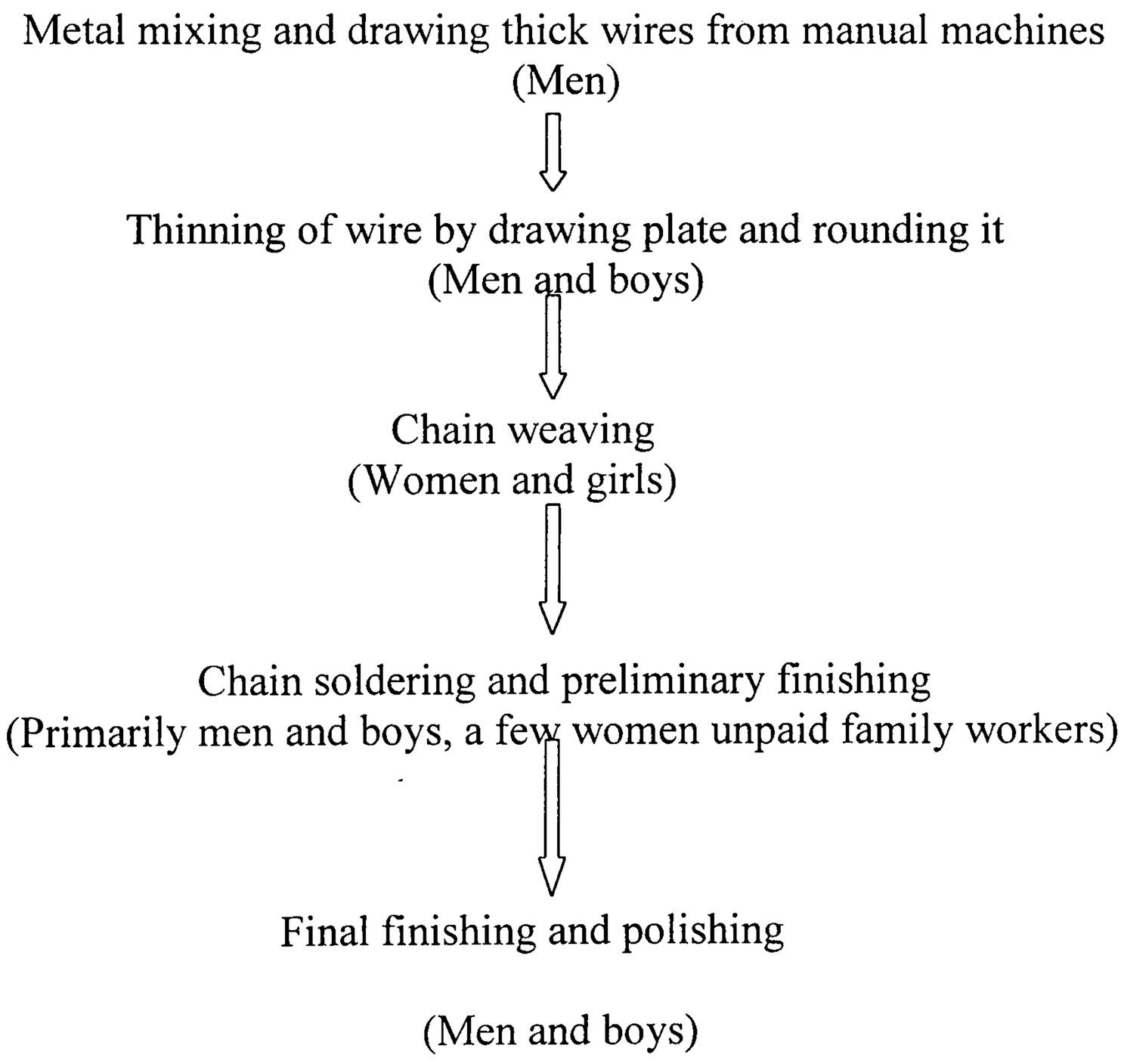
The woven chains are collected from the women to be soldered in the workshop, and some preliminary finishing by way of filing is done. Soldering involves setting the chain on wax and putting cadmium on the interlocks to be soldered. Next a thick paste of plaster of paris and water is added to the chain. This is to keep the shape of the chain intact when soldering. The plaster of paris is left to harden, then the chain is soldered by blowing hot air through a pipe held on to a blowlamp. Paraffin wax is used to keep the blowlamp burning. After it is soldered the plaster of paris is removed and the chain is then supplied back to the contractor. Polishing and final finishing are done in the contractor's workshop. To polish the chain, it is dipped in a solution of ammonium chloride and boric acid, which is in a bucket-like container, and is then cleaned with a brush. Final finishing of the chains is done by fixing the hooks and stamping the chain with the initials of the company to which it will be supplied. In some cases the contractor may not own any workshop and may just be an intermediary between the village and the city, in which case even the final finishing and polishing is done in the artisan/subcontractor's workshop.

4.5.2 The Labour Process

Gender and Age Division of Labour

Women and girls are involved in chain weaving alone and are largely excluded from all other processes of production like melting, soldering and finishing. Men and boys are engaged in mixing metal, drawing wire, soldering, finishing and polishing.

Figure 4.5 Process of Silver Chain Production and the Gender, Age Division of Labour



It is important to note that soldering skills have a high degree of transferability to handmade jewellery production in Delhi and NEPZ, where gold sets are made. The gender division of different processes of production is accompanied by a vertical segregation of women at the bottom of the hierarchy as 'homeworkers', and their exclusion from the ranks of artisan/subcontractors and contractors. In Figure 4.5 is shown

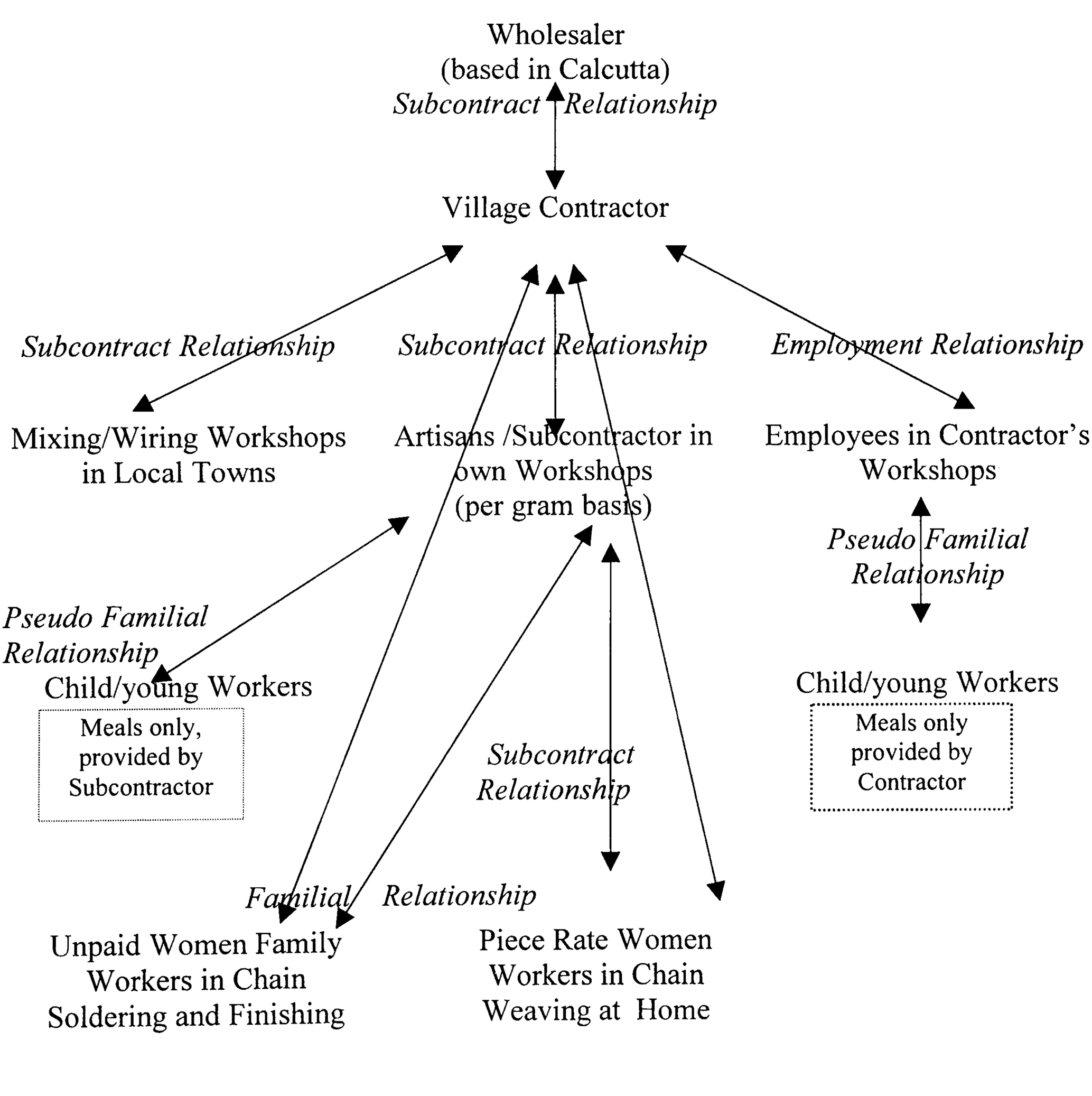
the production process, the gender and age division of labour in silver chain production in Medinipur.

Kinship Networks, Subcontracting and Male Child/young Workers

The labour process in silver chain production in the villages of Medinipur operates through a complex system of subcontracting in which the male child/young workers and women are at the bottom of the hierarchy. Induction and control of labour are related to kinship networks. Typically a contractor from the village gets silver from Calcutta and supplies the finished chains to the wholesaler in Calcutta, from where the chains may be sold in the domestic market or exported. The contractor from the village may have a small workshop as an extension of his residence where some processes of production, in most cases the final processes of finishing and polishing, are carried out by employees and by child/young workers. Unlike in the NEPZ and Delhi workshops, the employees and child/young workers work only during the day and go back home in the evenings. For all the other intermediate processes the contractor supplies the silver to an artisan cum subcontractor. The artisan/subcontractor employs child/young workers in his workshop to carry out some processes like cutting, soldering and filing. Some of the child/young workers continue to study and work part time in the workshop. Some contractors and artisan/subcontractors are assisted by their wives and other family members. The weaving of chains is done by women who are home workers and work on a subcontract basis for the contractor or artisan/subcontractor. The contractors and artisans/subcontractors get payment on a per gram basis. The employees working in the workshops are paid a daily wage. The daily wage workers or employees here are those

men who did not have even the minimal capital to buy the silver chains in the first instance, and most moved on to become artisans/subcontractors in a short period.

Figure 4.6 Production Relations in Silver Chain in the Villages of Medinipur



Women homeworkers are paid on a piece rate basis. The child/young workers are not paid but given food or a small pocket allowance. The production relations in handmade jewellery production in the villages of Medinipur are shown in Figure 4.6.

The gender division of different processes of production is accompanied by a vertical segregation of women at the bottom of the hierarchy as 'homeworkers', and their exclusion from the ranks of artisan/subcontractors and contractors. However, the boundaries of the gender division of labour are permeable and there are a few women involved in soldering and finishing of the chains as unpaid family workers. In contrast none of the men are engaged in chain weaving.

Demographic Profile

In Table A.3 in Appendix IV, I present the demographic and work profile of the respondents in Medinipur. All the male respondents are married and most have education up to primary level. Two contractors - Nikhilesh and Devinder - have education up to 'A' levels. Ten women respondents are married, two unmarried and one separated. Most of the women have primary level education.

Wage Structure, Margins and Work Conditions

My respondents in Medinipur comprise men who are contractors or artisans/subcontractors and women who are homeworkers or unpaid family workers. Most of the time the contractors are themselves involved in silver chain making as well as in the supervision of the employees. The net payment for the contractors varies from Rs 300-Rs 500 for a kilogram of silver processed and they earn between Rs 1000 and Rs 3000 per month. All the three contractors said that they devoted around 7-8 hours per day to jewellery work. Wives or other family members of contractors work on an unpaid basis for them.

The workshops are an extension of the houses of the artisan/subcontractor or contractor. The payment for the artisans/subcontractors varies from Rs 3-4 for a chain and their income varies from Rs 700-Rs 1200 per month. Some of them are assisted by unpaid family workers and/or by child/young workers. Two of the artisans/subcontractors - Dhiraj and Anand - had returned to the village after having worked in Delhi. Two other respondents who are working in Calcutta and were interviewed in the village have not been incorporated in Table A.3. The hours of jewellery work for the artisans/subcontractors varies between 7-14 hours per day. Though I did not interview any fixed wage artisans, I learnt from the contractor that the fixed wage artisans are paid a daily wage of Rs 40 without food or Rs 30 with food for an eight hour day. The years of training for the male respondents varies between eight months to four years. All the men have acquired training in the workshops.

As regards the women respondents, three were involved in soldering and chain finishing as unpaid family workers. Ten of the women respondents were involved in chain weaving from their homes. The women worked intermittently on chain weaving to fit it into their daily schedules and their hours of work varied from two to eight in a day. The women were paid at the rate of fifty paisa[10] for a chain and their monthly wages varied from Rs 60 to Rs 300. All the women involved in chain weaving said that they had learnt it by watching other women do it at home. According to the women artisans in chain weaving their training varied from two days to ten months. For the three women working as unpaid family workers in chain soldering and finishing the time of training varied between three months and one year. I next present case studies of a male contractor and a

female artisan to illustrate the complexities of the labour process in chain production in Medinipur.

Case study 3: Based on the interview with Nikhilesh Mayati on 4th December 1996

Nikhilesh is a forty-year-old contractor, educated up to year 12. He learnt silver jewellery work from his father's brother at the same time as his schooling, working in his uncle's workshop for 7-8 hours per day. Nikhilesh said that he had learnt silver work in six months but he continued to work as a trainee for three years. During the course of training he was paid Re1 a day in the initial six months as a pocket allowance and later Rs 3.50 a day for another two years and six months. He started his own workshop in 1975 after three years of working in his uncle's workshop. Initially his wife assisted him as an unpaid family worker. However, after his earnings stabilised his wife gave up the work. Now he has a workshop where four adult artisans and four trainees work for him. They mainly engage in polishing of chains, but also do soldering and finishing. Most of the time he gives the silver wires to the artisans/subcontractors in the village for processing and only does the final polishing in his workshop.

Nikhilesh has a son aged 12 and a daughter aged 10, who are studying in school. He wants his son to go in to higher education and does not want him to do jewellery work. Nikhilesh has four brothers, one working in gold jewellery in Delhi and another in Calcutta. They keep close contact with the village and the family, and visit the village 2-3 times a year. Of the other two brothers one is a contractor like Nikhilesh and the other is in the construction line. He said that they have some family land where they grow rice and vegetables, which is sufficient for his parents and all the brothers and their families in the village.

The case study of Nikhilesh indicates the importance of kinship in the initial induction in the jewellery line. It also indicates a prolonged period of training during which nominal payment is made to the artisan. The role of his wife as unpaid family worker in the initial years of his business, and her later withdrawal from the work, indicates the role of women in the husband's class mobility, also important in Delhi.

Case Study 4 Based on the interview with Urmila on 2 Dec 1996

Urmila is a twenty-two year old woman who has been married for nine years. She has two children, eight and six years old. She has studied up to year six. Her husband

migrated to Bombay five years ago and works in a gold jewellery factory there. He visits his family twice a year and sends Rs 700 per month. He earns Rs 1500 per month, which is not enough to support his family in Bombay.

Uma learnt chain weaving four years ago after observing other women in her husband's family. It took her two months to learn it. She is engaged in jewellery work for 2-4 hours in a day and fits it in her daily schedule of cooking, cleaning, grazing the cattle and looking after her children. She earns Rs 100-150 a month. Uma keeps that money as precautionary money, but most of the time spends it on items she fancies for herself such as cosmetics or clothes. Uma is not interested in learning to solder for she thought that it is difficult work and she did not have the time for it. She is not very fond of jewellery work and said that she dreamt of the day when her husband could earn enough so that they could stay together as a family and she did not have to do any chain weaving.

Uma considered domestic chores as her responsibility and her husband did not share in any chores when he was with her in the village. However, they shared in decision making in the house.

The case study of Uma indicates the manner in which women consider their role in chain weaving and income earning as secondary to their role as homemakers. It shows the way women fit their chain weaving into their daily schedules and also indicates that though in many cases husbands are the primary earners, they are not necessarily the sole earners.

4.6 CONCLUSIONS

This chapter has been devoted to a description of the production and labour processes in the three sites - NEPZ, Delhi and Medinipur - and in the two types of jewellery production - handmade and machinemade. The production process for machinemade jewellery is fully capitalised with factory production and direct wage relations. In handmade jewellery production in the village as well as in the city and the zone, many features of early capitalist production systems with artisanal production, and self employed subcontracting relations with child/young labour, are widely prevalent. I

present below a summary Table of the different features of jewellery production discussed in the chapter.

Table 4.7 Features of Jewellery Production in Different Sites of Production

		NEPZ		Delhi	Medinipur
Nature of Production		Machine made	Handmade	Handmade	Handmade
Market		Foreign	Foreign	Foreign and domestic	Domestic
Gender and Age Composition of Employment	M	75% adult men	All men and male youth	Primarily men and male youth	Men and male youth in workshops
	F	25% adult women	None	Marginal presence of adult women as unpaid family workers	Wide prevalence of women and some girls as homeworkers

Women constitute a quarter of the workforce in machinemade jewellery production in NEPZ, largely segregated into the wax casting, packing and quality control departments. Men, who are the majority workers here, work as masterpiece makers and in the gold casting, polishing and metal studding departments. The variation in the wage levels of the women workers across the different companies is much higher than the variation in the wage levels of women and men within a company. The overall average wage of women is lower than that of men, and further overt discrimination against women is practiced in other policies such as their continued status as temporary workers.

There is a total exclusion of women from handmade jewellery production in NEPZ and they have only a marginal presence as unpaid family workers in Delhi. Male artisans from the Medinipur district of West Bengal, who are inducted into the sector through real and fictive kinship ties, dominate handmade jewellery production. Subcontracting and a wide prevalence of male child/young workers are common in both Delhi and NEPZ.

Silver chains are the popular forms of jewellery produced in the villages of Medinipur. Here as my analysis will show, there is a wide prevalence of women as chain weavers who work from the confines of their homes. Men predominate in chain soldering and finishing, though there is some crossing over of this gender division of labour by women who work as unpaid family workers in soldering. Subcontracting and a wide prevalence of child/young workers in the jewellery workshops are common in the villages of Medinipur.

In the next chapter I take up analysis of the processes of gendering in different sites and forms of jewellery production.

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[1] The exchange value of the rupee in relation to pound sterling varied between £1=Rs 52.7 in May 1996 to £1=Rs 60.6 during the course of my fieldwork.

[2] Carat denotes the purity of gold used in jewellery, so that high carat gold jewellery has a greater proportion of gold as compared to other metals like cadmium.

[3] The respondents were not selected systematically because the entrepreneurs and managers largely controlled access. Thus the sample is not random or representative. It is thus difficult to say that the pattern of marriage or singlehood is representative of the population. On the other hand the respondents represent a high proportion of the total female employees in the six machinemade jewellery units (19%), and so the proportion of married women is suggestive of a wider pattern.

[4] The Employees Provident Funds and Miscellaneous Provisions Act came into existence in 1952 to ensure compulsory Provident Fund, Family Pension Fund and Deposit Linked Insurance in factories and other establishments for the benefit of employees. It applies to factories employing twenty or more persons and is engaged in the manufacturing of the items as mentioned in Schedule I of the Act. (Kumar, 1995: 27).

[5] The Employees State Insurance is the first major legislation on social security for industrial workers in India. The Scheme as per provisions of the Act is devised so as to provide social protection to workers in contingencies such as illness, long-term sickness or any other health risk due to exposure to employment injury or occupational hazards. The Act applies in the first instance to non-seasonal factories using power and employing 10 or more persons and non-power using factories employing 20 or more persons. As of now employees of the covered factories and establishments earning wages up to Rs.3000 per month come under the purview of the scheme. (Kumar, 1995: 40).

[6] Section 79 of the Factories Act 1948, as amended by Act 94 of 1976, provides for earned leave with wages to the workers in addition to the weekly holidays and compensatory holidays. Under Section 79 of the Act as amended w.e.f. 26th October, 1976, every worker who has worked for a period of 240 days or more in a factory in a calendar year is qualified for annual leave with wages to be availed by him/her during the subsequent calendar year or during any other calendar year (Kumar, 1995: 222).

[7] In 1961, the Maternity Benefit Act was passed aiming at a uniform maternity benefit all over the country. Subject to the provisions of this Act, every woman shall be entitled to, and her employer will be liable for, the payment of maternity benefit at the rate of the average daily wage for the period of her actual absence, this is to say, the period immediately preceding the day of her delivery. The maximum period for which any woman shall be entitled to maternity benefit shall be twelve weeks of which not more than six weeks shall proceed the date of delivery (Kumar, 1995: 129).

[8] I use the term plain jewellery to contrast it with stone studded jewellery.

[9] According to Liddle and Joshi (1986: 92) 'Seclusion is not a specific set of constraints on behaviour, but an approach to how a woman should live in a patriarchal society. It ranges from the strictest purdah to the general idea that a woman's place is "in the home". Its essential feature is that it privatises women and confines them to the domestic sphere, which helps to control both their sexuality and their economic independence from men.'

[10] A rupee is equivalent to one hundred paisas.

CHAPTER FIVE

THE FEMINISATION AND MASCULINISATION OF JEWELLERY PRODUCTION

5.1 INTRODUCTION

This chapter addresses the question of how the feminisation and masculinisation of jewellery production are constituted in the different sites and types of production. In this context I will examine the role of discourse, social practices and masculine and feminine subjectivities and identities in structuring a gendered labour market. The analytical question I address in this context is

- What are the gendered labour processes which constitute the feminisation and masculinisation of jewellery production in the three sites - NEPZ, Delhi and Medinipur?

I argue that the discourses, practices and gendered subjectivities mutually constitute each other and reinforce the masculinisation and feminisation of work in the different types and sites of jewellery production.

The chapter is organised into three main sections, one for each type of production plus an introduction and conclusion. Each section considers the production and labour costs and

the gender division of labour in one type of production, followed by discussion of the discourses and practices that are used to explain the cost structures and gender division of labour. The sections in this chapter are organised in a different way from the previous two chapters. Chapters 3 and 4 were organised according to the process of research, moving from machinemade jewellery production in NEPZ to handmade jewellery production in NEPZ and Delhi and finally to handmade jewellery production in the villages of Medinipur. The organisation of this chapter and Chapter 6 is based around the question of labour migration and the development of the production system. I begin with Medinipur, the site from which labour migrates and where production is organised as a combination of precapitalist craft work and capitalist relations. I then move on to handmade jewellery production in Delhi and NEPZ, where the migrant labour is absorbed and where production relations are similar to those in the villages of Medinipur. The machinemade jewellery production in NEPZ, which represents capitalist production relations, is discussed last. The conclusions summarise the manner in which discourses, subjectivities and practices are mutually constitutive of a gendered labour process and also examine the implications of different meanings of feminisation in the context of my study.

5.2 CHAIN PRODUCTION IN THE VILLAGES OF MEDINIPUR: MOBILE MEN AND HIDDEN WOMEN

Silver chain production is the primary jewellery item produced in the three villages of Panna, Sagarpur and Mahabatpur that I visited in the course of my fieldwork. Chain

production is characterised by a system of contracting out by contractors who bring silver from Calcutta. I have already described in detail the production process of silver chains in Chapter 4. Some initial processes, like mixing metals and drawing wires, are carried out in the towns of Daspur and Ghatal, while others, like soldering and finishing, are carried out in the contractor's and subcontractor's workshop. Men and boys carry out all these processes. Women carry out the most labour intensive work of chain weaving in the confines of their homes. However, there is some permeability in the gender division of labour and a few women are engaged in soldering and finishing of chains.

5.2.1 Wage and Cost Structures

The following wage and cost structures relate to a popular variety of chain called 'English chain'. I initially rely on the account of Nikhilesh, a contractor of silver chains in Panna, and then subject this to critical examination, bringing in other information, particularly that provided by the women respondents.

Nikhilesh's Account

According to Nikhilesh, one of the big silver contractors in the village, he is paid Rs 500 for processing 1 kilogram (kg) of metal (typically 80% silver and 20% cadmium) into finished chains. He said that his costs are about Rs 200-250 and Rs 250-300 is his profit per kg[1]. According to Nikhilesh about 50 chains of around 18-20 inches in length can be made from 1 kg of metal. He provided a breakdown of the costs and time taken for the various stages in the chain production process, as shown in Table 5.1.

Nikhilesh added that the charges would vary with the thickness and hardness of the chain, so that if there is a greater proportion of cadmium, the chain will be harder and the charges for cutting and weaving will be higher. His estimated total cost of chain production at Rs 216 per kg of metal is in line with information provided by subcontractors, who said they are paid Rs 4/- per chain for all processing after the melting and drawing of wire, including finishing and polishing. With about 50 chains per kg their payment would be Rs 200.

Table 5.1 Production Costs and Time Taken per Kilogram of Metal Processed into Silver Chains in Medinipur

Process (Location)	Cost Per Kilogram of Metal (in Rs)	Time Taken Per Kilogram of Metal
Melting and drawing of wire (Local towns)	16	10 minutes in a powered machine
Cutting and rounding (Subcontractor's workshop)	20	1 hour without helper
Weaving/ Garlanding (Homeworkers)	40	48 hours
Soldering and filing (Subcontractor's workshop)	80	14 hours without helper
Finishing and polishing (Contractor's workshop)	60	1 hour without helper
Total Cost	216	
Payment made to Nikhilesh	500	
Profits of Nikhilesh	284	

Source: Estimates from Nikhilesh, Medinipur Contractor

However, I contest the above estimates on the basis of other evidence, showing Nikhilesh's profit margin to be higher and revealing the profit margins of the subcontractors involved.

Contesting Nikhilesh's Estimates

There is little additional evidence contesting the estimates of the cost of melting and drawing or cutting and rounding provided by Nikhilesh. However, in the case of weaving and garlanding of the chains, the information from my women respondents points to an over estimation by Nikhilesh of the time taken and reveals the subcontractor's margin, that he did not mention. According to Nikhilesh, it takes 48 hours of labour time to weave 50 chains out of 1 kg of metal (at the start), which works out at 59 minutes per chain. Rs 40 are paid for 50 chains, each one taking almost one hour to produce, so the hourly rate of pay is about 80 paisa by Nikhilesh's estimate. However, in no case is the payment to women homeworkers for 'English chain' more than 50 paisa per chain, making the cost to Nikhilesh for the weaving only Rs 25/kg. The deficit of Rs 15/kg could be the margin of the subcontractor between Nikhilesh and the chain weavers.

In Table A.2, located in Appendix III, I present the calculation of the average hourly wage rate for the sample of women workers engaged in chain weaving. Though all women said that the payment per chain is Rs 0.50, the estimate of their average hourly payment varies between Rs 0.83 and Rs 1.67. The average hourly wage for women respondents works out at Rs 1.35. The average time taken by a woman to weave a chain would then work out at 22 minutes per chain. The exaggerated estimate of Nikhilesh for

the time taken by women to weave one chain could be indicative of a successful campaign by the women workers to overestimate to the subcontractor/contractor the time taken to weave a chain, to reduce the extent to which their labour is cheapened. All the actors in the labour hierarchy have reasons to keep the true costs they incur, as payment to others or in their own labour time, to themselves and to overplay them if possible to others.

There is little evidence with which to contest Nikhilesh's estimates of the time taken and cost incurred in soldering and filing. However, the costs apparently incurred in finishing and polishing, given as Rs 60/kg, seem to be a gross overestimate. In Nikhilesh's case the finishing of the chains is done in his workshop, where fixed wage artisans are paid Rs 40 for an 8 hour day. Thus the wage cost for one hour of finishing and polishing is only Rs 5. Even if we allow a generous margin of Rs 10 for the cost of raw materials like ammonium chloride and borax, plus another Rs 10 for the fuel required and for depreciation of the equipment, in no case can the cost of finishing and polishing to Nikhilesh be more than Rs 25 per kilogram of chains.

The estimates of the cost of production provided in Table 5.2 will go down further if account is taken of male child/young workers. As was admitted by Nikhilesh, although a person learns in six months, his apprenticeship period is deliberately kept at two years, during the course of which he is not paid anything, and is given one meal a day in the workshop. This implies that the workshop production costs are even lower, as a result of 'super-exploitation' of the child/young worker. If we take the food expenditure at Rs 10

a meal (as given by Nikhilesh, which may well be an exaggeration), a child/young worker working for 8 hours gets a pittance of Rs 1.25 per hour for two years. According to Nikhilesh the productivity of the child/young worker reaches that of an adult artisan after six months, so that over the next year and a half there is a subsidy of Rs 3.75 per hour, given the wage of an adult male employee is Rs 5 per hour. If we take the estimated speed of a child/young worker (as given by Nikhilesh), at half the speed of an adult artisan in the initial six months, it implies a subsidy of Rs 1.25 per hour for the contractor.

Table 5.2 Revised Production Costs and Time Taken per Kilogram of Metal Processed into Silver Chains in Medinipur

Process (Location)	Cost Per Kilogram of Metal (in Rs)	Time Taken per Kilogram of Metal
Melting and drawing of wire (Local towns)	16	10 minutes in a powered machine
Cutting and rounding (Subcontractors workshop)	20	1 hour without helper
Weaving/ Garlanding (Homeworkers)	25 (payment to women) + 15 (subcontractor's margin)	27 hours
Soldering and filing (Subcontractor's workshop)	80	14 hours without helper
Finishing and polishing (Contractor's workshop)	25	1 hour without helper
Total Cost	181	
Payment made to Nikhilesh	500	
Profits of Nikhilesh	319	

Source: Based on estimates of Nikhilesh, artisans/subcontractors and women homeworkers, Medinipur

Thus Nikhilesh will benefit from even lower costs for finishing and polishing through the use of child/young workers, and the other artisans/subcontractors involved may also benefit by charging Nikhilesh a price that relates to waged adult labour but using a proportion of child/youth labour that is further 'cheapened'.

The unpicking of the costs incurred by Nikhilesh has helped to show the potential sites of accumulation in the production process and the ways in which different men occupy them. The important point to note in this context is that women have little prospect of occupying any of these sites.

The Labour Hierarchy

According to Nikhilesh's estimate, the hourly wage of women workers is Rs 0.80, whereas according to my calculation, based on women respondents, it works out at Rs 1.35 per hour. Nikhilesh's estimate of women's hourly wage is less than his estimate of the monetary value of food (Rs 1.25/hour) provided to male child/young workers. My estimate is slightly higher. Whatever the case is, a male child/young worker can go on to earn an adult wage, or even to become a subcontractor or a contractor, or can migrate to the city in search of higher wages. But in terms of the undervaluation of women's work, the exploitation might continue in the same form and to the same extent throughout their life. As Elson (1982: 493) has rightly pointed out in comparing the exploitation of children with those of women workers 'Only when they [referring to child workers] have passed over to adult status can they be recognised as "skilled" and "breadwinners"- or rather when boys have passed over to adult status, for the girls the problem remains.'

Whereas the constitution of masculinised work in the villages includes the possibility of social mobility through something akin to a 'career structure', feminised work is constituted as static: there is nowhere to go and no means of rising or improving one's conditions of work.

As can be noted from Table 5.2, chain weaving is the most labour intensive process of production. Notwithstanding my adjustment of Nikhilesh's estimates, it takes 27 hours to weave one kilogram of chain in contrast to 16 hours ten minutes taken in all the other processes added together. Thus, chain weaving constitutes sixty four percent of the total labour time and women are therefore the majority work force in the villages of Medinipur. It is thus in the interest of the contractors to ensure that weaving is constructed and maintained as a low skill, low value job, because of it being the most labour intensive part of the labour process. But the male artisans also benefit from this, as they do not have women competing for their work.

In terms of the vertical division of labour by wage levels, women and male child/young workers are at the bottom of the hierarchy. Women are also segregated in the lower echelons of the division of labour in that their skills in chain weaving have little transferability to the other types of jewellery production popular in Delhi and NEPZ, such as rings and necklaces. On the other hand, soldering is used for all items of jewellery and has wider applicability and transferability as a skill. Moreover, the male child/young workers have the potential for upward mobility and could become subcontractors/contractors in their own village or migrate to the cities. But, as I will show

in the following sections, most women are forever trapped in their primary idéntities as housewives, where they are not recognised as workers, do not interact freely in the market and do not migrate independently to the cities.

Women's jobs are constituted as the lowest skill, lowest value part of the labour process in handmade silver chain production, while men's jobs are constituted as comprising transferable skills which are more highly valued. Women's jobs are also constituted as socially and economically static, while men's jobs are socially and economically mobile and men have the possibility of moving up and out. Women can neither move up the hierarchy of jobs nor out to other geographical locations, because they are in the main organised out of the labour processes which contain skills transferable to other kinds of jewellery production. A small number of women have managed to get into intermediate jobs like soldering, but only as unpaid helpers to their husbands.

In the next section I take up the different discourses deployed by men and women engaged in chain production, which feed into their gendered subjective identities and sustain the practices of seclusion of women, the labour hierarchy and the gender division of labour. The dominant discourses, the gendered subjectivities and the discursive, social and material practices form a loop-like structure, such that they mutually constitute each other. The focus of analysis is on chain weaving and chain soldering and finishing, as these are the primary activities of women and men engaged in silver chain production and because all the respondents I interviewed are engaged in one of these activities.

It is important to note that the discourses of all men and all women about men's work and women's work are not always the same. The dominant discourses prevalent in the public sphere are espoused by men who are dominant in the public sphere, though all men do not necessarily invest in them. Women's discourses are more varied - while some women invest in the dominant discourses, others contest them. However the contestations of women, heard only in the private sphere, challenge the dominant discourses but do not transform them.

5.2.2 Gendering of Chain Production in Medinipur: Discourses, Practices and Subjectivities

Foucault (1982) theorises the production of different discourses in terms of the functioning of power relations: particular power relations produce particular material and discursive practices which themselves are productive of power relations. He theorises power as a 'process' - as a 'way of acting upon others' to produce particular 'ways of seeing/being' in relation to the external world. Lukes (1974: 23) stated 'Indeed, is it not the supreme exercise of power to get another or others to have the desires you want them to have - that is to secure their compliance by controlling their thoughts and desires.' Discourse has been used differently in different contexts by different authors. In the context of my analysis, I find the definition in the Penguin dictionary of Sociology (1984: 71) useful. Discourse is defined as a domain of language-use that is unified by common assumptions. In my analysis of the discourses about gender and chain work that circulate in Medinipur, an important distinction can be drawn between hegemonic and contested

discourses. I ask how specific discourses both feed into and are shaped by discursive and material practices and will demonstrate the ways in which the investment in different discourses both shapes and are shaped by the subjectivities of men and women.

Discourse of denial

The chain weavers in Medinipur are the 'hidden' women workers whose presence was denied by many male informants in Delhi and NEPZ, even though they constitute a majority of the workforce. However the discourse of denial was not absolute or hegemonic. Many men when denying the involvement of women in chain work would qualify their statements by saying that women are not doing chain work anymore, but were doing in the past, or that it is not done in their village but in some other village, or that it is not done in their home but could possibly be done in other homes. Thus, when I asked Ravi Pal, an artisan in NEPZ who had migrated from Panna village, about the presence of women in chain work, he said 'You are talking of Panna, women used to do the work earlier, but not now, since many men have migrated and the households are better off'. Suman, an employee in NEPZ and a migrant from Panna village, when questioned regarding the engagement of women in chain work in the village, said:

> No, women do not engage in silver work in my family. Women do not do the work in the families where finishing work is done. Some women weave the chains at home. But in any household which is reasonably well off, women do not work. They work only in those households which are financially tight.

Drupad, a migrant from Sagarpur village, when asked about the engagement of women in chain work said 'None of the women from my village does it. Some women from nearby

villages might be weaving chains in the households which are very tight, and where men are not able to provide for the household'.

Gendered subjectivities

Running through all these statements is the assumption that a woman's engagement in chain work is related to a failure of the men in her household to provide for the family. Thus, the denial of women's involvement in chain work in one's home or village can be seen as related to the male artisan's attempts to disassociate himself from such positions of failure, and to construct the successful achievement of masculinity as the enactment of the breadwinner role. Related to this construction of themselves as breadwinners is the dual and opposing construction of women as housewives. The discourse of denial of women's chain work in Medinipur and the discursive practice of seclusion of women are mutually constitutive.

Practice of seclusion of women

Women in the villages of Medinipur did chain weaving from the confines of their homes because of the discursive and social practice of seclusion, which restricted their mobility even within their own village. As I discuss later in the section the practice of seclusion is tied to the discourse on control over the (hetero) sexuality of women. However, seclusion of women also fed into the discourse of denial of women's work by male migrants in Delhi and NEPZ, and into the discourse of marginalisation of women's work by men in Medinipur, because it made the chain work of women publicly invisible. The practice of seclusion and restrictions on the mobility of women fed into the feminine subjectivities of

women as 'static' and 'immobile', and helped constitute their gendered subjective identities as housewives, bound to the domestic space. Seclusion also helped to sustain a gender division of labour and the practices of relative closure of soldering and finishing work to women, work primarily done in the visible spaces of workshops.

Discourse contestation

The discourse of denial of women's chain weaving work in Medinipur, though dominant among male informants in Delhi, was contested by some men and women. One such woman was Suneet, who was herself engaged in handmade jewellery production in Delhi and whose in-laws lived in Panna. She told me that women were weaving chains in almost all the households in Panna and in adjacent villages. She later became my most important contact point in Panna. Once I went to Medinipur, male informants could not sustain the discourse of denial of women's work used by male employees/artisans in Delhi and NEPZ. Instead the male informants invested in the discourse of women's chain weaving as a leisure activity.

Discourse of chain weaving as leisure activity

In some cases the male informants were initially reluctant to admit the involvement of the women in chain work. At my persistence many men would agree that women were involved in chain work but deride it as a 'spare time activity' done for 'pocket money' and thus less than 'work'. Some men emphasised the marginal nature of the chain work done by their wives by emphasising the amount of household work that their wives had to do, which left little time for chain weaving. I present here an extract of my conversation with

Samesh Kumar, a contractor himself engaged in soldering and finishing of chains in Panna.

US: Does your wife also know chain work?
SK: No.
US: Does she know how to weave a chain?
SK: Very little, she has other household work as well.
US: Does she weave chain now?
SK: No.
US: Did she do it before?
SK: (A long pause) Yes earlier she used to do, now she does not get the time for it. She has to do household work, how will she get the time? She does it sometimes *in her leisure* (my emphasis) now.

Sunil, another subcontractor and artisan, when asked about the involvement of his wife in chain production, said 'I am the only one in the family who does chain work'. When I probed further he said 'My wife does not do much chain weaving now, as she has to do other household work. She does it now and then to earn some pocket money for herself'.

Some men did not only undervalue the chain work done by their wives, but also underestimated the time their wives were engaged in chain work. Thus, when Dhiraj was asked the hours his wife, Kavita, devoted to chain work, he replied 'How much can she work - two hours per day.' Later when I interviewed Kavita she told me that she worked on average for five to six hours per day.

Gendered subjectivities

Running through these discourses undervaluing women's chain work is the assumption that women cannot be wage earners, and if they do earn a wage it does not contribute substantially to the household budget. Thus when the men were forced to admit that their wives engaged in wage labour, the women's work was constructed as its opposite - leisure

- and the women's earnings were conceptualised as separate from the family income and as pocket money. This was a means of trying to maintain the man's masculine identity, crucially derived from his role as breadwinner.

The investment of men in the discourses of marginalisation of women's chain weaving was tied to, and helped to shape, the masculine subjectivities of men as 'breadwinners'. Tarun, while admitting the involvement of his wife in chain weaving, said 'I have to think of providing for my family and she has to look after the children and cook. If she is left with some time she engages in chain work. What will she do in her leisure time? This gives her some pocket money'. Men took the initiative in constructing themselves as 'breadwinners' and constructing women in a complementary and lower role as 'housewives'. However, men were not always the real or the only breadwinners and women were supporting their families, both within marriage and upon its breakdown.

Practice of seclusion and of low wages of chain weavers

I have already discussed how the discourse of denial and the practice of seclusion are mutually constitutive. The discourse of marginalisation of women's work in chain weaving is also linked to the practice of seclusion and the invisibility of women's economic activity. Thus though women are the majority workforce in Medinipur, the restriction on the spatial mobility of women and their confinement to the home made their chain work invisible. Seclusion and the invisibility of women's work are mutually constituting and they help to create men's subjectivities as breadwinners and women's as housewives. A similar conflict between economic survival and male honour, linked to

men's ability to provide for the family and keeping women at home, is noted in Shaheed's (1989) case study of Lahore in Pakistan. In this study the 'conflict' is resolved by women taking up home-based piece work, a striking similarity.

The discourse of chain work as 'not real work' producing 'not real wages' though not hegemonic, was certainly dominant amongst the men. I would argue that it helps to sustain the practice of very low hourly wage rates of Rs 1.35 for chain weaving. At the same time, although men in most situations were not the sole providers, the construction of masculinity as the performance of the breadwinner role fed into the practice of higher hourly wage rates of Rs 5 for adult men engaged in chain soldering and finishing in the village.

Discourse contestation

The discursive position of women is more complex and varied than men. While a majority of women recognise their work in chain weaving as *work*, in many instances they consider themselves as secondary earners and emphasise their identities as housewives. Many women felt that although they had a lot of household work, chain weaving was additional work they had to do for a cash income. Reena, together with many other women, complained of pain in the eyes caused by the large amount of chain weaving she did. These women were clear in their conceptualisation of chain weaving as *work,* which they did to earn money for their family. Damini's husband earned Rs 500-600 per month in chain soldering and finishing and her family was engaged in subsistence agricultural production. However, the wages of her husband were not enough

and she wove chains for around four hours a day, earning Rs 150-180 a month. According to Damini 'My husband works hard, but the money is never enough for the house. I have to do chain work, besides all the other household work. Even after that we live very tight.'

There were other women chain weavers who were not supported by their husbands at all and whose income from agricultural production and support from their in-laws or natal families was insufficient. Puja, who was separated from her husband and had an eight year old son, was staying with her parents and wove chains for as long as five to seven hours per day to contribute to the family budget. Parvati, whose husband had migrated to Delhi and who was living with her in-law's family, on being asked of her involvement in chain weaving said 'I have to do chain weaving, otherwise how will I get the money? I have so much work in the house, I feel tired. My hands and eyes hurt when weaving a chain. My husband has not been sending any money for the last six months.' Parvati's case undermines the generalisation that women are supported by their male migrant husbands. When expressing her reluctance to migrate to Delhi she said 'My husband is not responsible. Who will feed me there? At least here I am able to feed myself.' Parvati's statement highlights her contradictory subjectivity, whereby her experience does not fit in with her discursive positioning as a 'housewife'. However, for other women involved in chain weaving, who continued to be supported by their husbands at least partially, the break from their subjective postioning as 'housewives' was not so clear cut.

Both men and women talked about domestic work as an essential and natural responsibility of women. When I asked Damini whether her husband shared in household chores, she replied 'He has to do silver work. You do not expect men to wash utensils?' Often my question about household work sharing was interpreted to mean sharing it with other women, in the case of extended families. Thus, although many women in the villages of Medinipur looked upon chain weaving as *work,* this work did not alter their primary identities as homemakers, or substitute for their domestic responsibilities.

Besides, there were some women who used their identities as housewives and the idea that wages earned from chain weaving are 'pocket money' to keep control of their wages. When I asked Urmila what she did with her earnings from chain weaving she said 'I spend it on my personal expenditure. I buy anything I fancy like cosmetics, clothing etc. I do not spend any of my earnings on household expenditure.' She went on to add 'It is not my responsibility to provide for the family.' Thus Urmila used the male breadwinner discourse against her husband and in her own interest, to justify not contributing her earnings to the family. Here we see an example of women's agency in creating new meanings in practice from a discourse which devalues their financial contribution to the family.

Discourse of soldering and finishing as 'real work' requiring long training and of chain work as requiring no training

A related discourse popular among many male employees and artisans/subcontractors was the constitution of soldering and finishing as 'real work' which required long training.

Alongside this discourse was the undermining of chain weaving as a ' leisure activity' which required little or no training. I have already discussed the discourses around the constitution of chain weaving as 'not real work' in which many male artisans invested, so I take up the discourses and practices relating to the requirements of training for soldering and finishing in contrast to chain weaving. When I asked Prakash about his learning of soldering and finishing of chains he said 'It took me two years to get the training for the work. I was taught by my brother. During the course of my training I assisted my brother in soldering and finishing of chains. I worked for four years in the same workshop after learning.' Training in soldering involved learning by doing, so that the entire period of work until the artisans were made independent was their training period.

As previously noted, the formalisation and prolonging of 'training' of the male child/young worker provided a 'cheap' labour force to the contractors who paid only subsistence and in kind. However, running through the discourse of 'real work' requiring lengthy training is the valuation of soldering and finishing as skilled work, involving skills which could be usefully transferred to other sectors of the jewellery industry or to an improved position in the hierarchy of production relations. In contrast, chain weaving was conceptualised as requiring little training.

When I asked my women respondents how they learnt chain weaving, most said that they learnt it in a few days or a few months, by observing other women in their house or in their neighbourhood do it. The devaluation of chain weaving as unskilled is apparent in the remark of a male artisan, Sunil, 'She learnt chain weaving by herself at home - no one

can teach you by holding your hand'. In this case the training was informal and observation was considered sufficient to learn chain weaving. The period when women were perfecting themselves in the weaving of chains by doing was not considered as training.

Gendered subjectivities

The construction of chain soldering and finishing as real work requiring long training helped to construct it as skilled work and constituted men performing the work as 'skilled', which fed into the subjective identities of men as providers. The opposite discourse of chain weaving as a 'leisure activity' requiring little training, helped to construct it as unskilled, constituting women performing the work as 'unskilled', as 'non-workers', and as 'housewives'.

Practice of differentiated training

The popular discourse of chain soldering and finishing as requiring training and of chain weaving as requiring little training is tied up to the material and discursive practices of inducting male child labour as apprentices in soldering and finishing for prolonged periods, and of women learning chain weaving by observing other women do it at home. The training in soldering and finishing of chains was done in the contractor/subcontractor's workshop in the village. The period of training could vary from six months to two years, during which the male child/young workers were not paid anything in cash, but were provided only with food. In some cases the training took place in the family workshop where male children/youth worked as unpaid family workers.

There was arbitrariness in the period of training, which depended on the mentor. Nikhilesh, when talking about male child/young workers in his workshop, said 'I would like to keep him at least for a month and a half after the actual training, so that I will prolong his training period. The training in my workshop could vary from six months to two years. This is one of the tricks of businesses'.

Thus, the discourse of chain soldering as 'real work' involving transferable skills was shaped by and helped to shape the practices of training male child/young workers in a space outside the home: the context of the workshop helped to formalise and give recognition to the training process. On the other hand the discourse of chain weaving as requiring little training was shaped by and helped to shape the practice of informal learning of chain weaving by women and girls, through observation, in the private space of home, to which little or no recognition was given.

In the context of the discussion above, it is useful to distinguish the different concepts of skill delineated by Cockburn (1983):

> There is the skill that resides in the man himself, accumulated over time, each experience adding something to a total ability. There is the skill demanded by the job - which may or may not match the skill in the worker. And there is the political definition of skill: that which a group of workers or a trade union can successfully defend against the challenge of employers and of other groups of workers. (ibid: 113)

In this case the skill in the job of chain soldering and finishing was exaggerated and produced as skill through organising its practice in workshops outside the home and through the authority attached to it as men's work. In contrast, the skills in the job of

chain weaving were devalued, politically through its organisation outside the workshop in the domestic space, and in its low status as women's work.

Discourse contestation

The idea of soldering as requiring long and formal training was contested by the women who were engaged in it. When I asked Alka how she learnt the soldering and finishing of chains, she said 'I learnt it by observing my husband do it at home. It took me two to three months to learn.' This evidence suggests that soldering skills were valued as requiring lengthy training because they were largely done by men, and chain weaving was devalued by not recognising the training required because it was done solely by women.

It is important to note here that though there were three women who crossed the boundaries of the gender division of labour, there was no crossing of boundaries for men. When I asked Tarun whether there were any men engaged in chain weaving he said 'No, you will not find any men engaged in weaving chains, that is women's job. Men do not have the patience to weave a chain. Besides, why should they waste their time in a low paid activity, when they can earn more in soldering in the same amount of time.' Thus whereas women in some cases did men's work, men did not do women's work because it was constructed as low status work, which called into question their masculinity.

Discourse of soldering and finishing as 'tough' and as 'man's work'

According to many male artisans, soldering and finishing were 'difficult' for women, as soldering required lung strength and involved blowing a pipe to a fire to solder the chain and finishing was difficult and dangerous as it required working with a sharp filer. When Tarun was asked the reason for a negligible presence of women in soldering, he said 'Soldering and finishing are tough, even if women are taught soldering, only five in a hundred will be able to learn it'. Tarun commented on the absence of women from soldering by saying 'Women do not have the stamina to blow the pipe, they cannot sit before the fire for long. As such women these days are having so many diseases'. As regards finishing he said 'Finishing is dangerous and a 'man's work. Women can cut their hands when finishing.'

This discourse that soldering and finishing are particularly tough for women was also popular among many of my women respondents, who were not keen to learn to solder and finish the chains. When I asked Urmila whether she would like to learn soldering, she said 'No I would not like to. It is difficult work. It will take very long to learn - six months. I do not know of any woman engaged in soldering or finishing'. Here, the women invested in constructing soldering and finishing as difficult not just to affirm their feminine identity but also because being unaware of any women engaged in soldering due to their lack of mobility, this seemed the only discursive position to take.

Gendered subjectivities

The common assumption in all these statements is that soldering and finishing are particularly difficult for women and not at all or less so for men. The discourse draws on the typical dichotomies of work as tough/easy, dangerous/less dangerous with the former as suitable for men and the latter for women. These closely resemble the gendered polarities at work indicated by Game and Pringle (1983: 28-29). The discourse also exaggerates the physical differences between men and women, essentialising women as having less lung strength than men. In the context of what she calls the 'appropriation of muscle by men' Cynthia Cockburn (1981: 51) comments:

> Men, having been reared to a bodily advantage, are able to make political and economic use of it by defining into their occupation certain tasks that require the muscle that they alone possess, thereby barricading it against women who might be used against them as low cost alternative workers (and whom for other reasons they may prefer to remain in the home).

The construction of soldering and finishing as 'tough' helps to constitute men performing the work, as 'tough' and 'strong', which feeds into their subjective identities as providers.

Practice of exclusion of women

The discourse of soldering and finishing as tough and as 'man's work' re-produced the practice of soldering as masculinised work from which women were largely excluded. The practice of a relative exclusion of women meant little competition and helped sustain a better wage level for soldering.

Discourse contestation

The discourse of soldering and finishing as tough was not uncontested nor was the gendered division of labour completely exclusive, for I did find three women engaged in soldering and finishing. However, all three women worked for their husbands. When I asked Alka, who was engaged in soldering and finishing of chains, whether she found the work of soldering particularly tough, she said 'I do not find soldering or finishing very difficult. That way one has some discomfort in any work'. The assumption of soldering and finishing as particularly difficult for women is also questionable as many male children were engaged in soldering in the workshops. There were also men who complained of soldering as difficult work. Suresh, an artisan/subcontractor engaged in chain soldering and finishing said 'Seventy five percent of the people feel pain in the chest due to soldering. I have been working for the last 30-35 years. I do not like this work but I have to do it for this is the only work I know'.

Discourse of moral protection

The practice of women's seclusion was shaped by and fed into the discourse of control over women's (hetero) sexuality and the need for men to 'protect' women from other men. This shaped the practice of excluding women from soldering, which was in most cases organised in the communal space of a workshop.

Sunil, on being asked why women in the village did not do soldering replied:

> The women can learn it if they devote the time. But they do not get the time for it. Moreover I would not like my wife to work in a workshop with other male artisans. These days you hear so many cases of women's harassment and molestation. I would not have liked to expose my wife to such a situation.

Some women also expressed their reluctance to engage in soldering because of having to sit with unrelated men or elder in-laws. When Urmila was asked whether she would like to learn soldering, she said 'In the silver workshop, I cannot work with my father-in-law and elder brother-in-law. It is not considered good in our community for women to be seen with elder male in-laws or unrelated men.'

Gendered subjectivities

Women in the village affirmed the practice of seclusion not due to the coercive power of the husband, but because the discourse of moral protection was hegemonic, and women invested in it to affirm their subjective positions as *good women*. A similar implication of the 'ideology of seclusion' is noted by Agarwal (1989: 86) in the context of a village in the northern state of Punjab in India. Here women engaged in 'self imposed *purdah* (meaning veiling but used to signify all practices of seclusion)' for fear of gossip and of being labelled promiscuous. This also has some parallel with the study of working class women in a British context by Skeggs (1997). Skeggs argues that working class women produce themselves as respectable by internal regulation and specific policing of their bodies (Skeggs, 1997: 130).

Practice of seclusion and organising soldering and finishing in male workshops

In most cases soldering was organised in a workshop which was an extension of a subcontractor or contractor's home, where the male artisans sat together and shared tools. However, in the case of the three women engaged in soldering, none of them sat with other male artisans to work. All of them worked in their husband's workshop, in some

cases with the husband and in some cases even in the confines of the home. Thus, the work organisation of soldering changed with the entry of women, to reinforce and not to challenge the seclusion of women.

The material and discursive practice of a relative closure of soldering and finishing to women workers and their preponderance in chain weaving was thus related to the reinforcement of the subjective identities of men as breadwinners, providers and protectors and of women as dependent and vulnerable housewives. The closure of soldering and finishing work to women also served material purposes for male artisans, for it ensured for them better availability of work and also prevented wage levels from falling, as they might if women were allowed free access into soldering and finishing. According to Tarun, a migrant working in gold jewellery in Calcutta who had returned temporarily to the village, 'If many women want to learn to solder it will decrease the value of the male artisans. It will reduce the work available and also the wage levels of the male artisans and they will not allow this to happen.' This substantiates Liff's (1986) claim of the agency of men in preventing women from substituting for men.

The above discussion has explored the dynamics of the processes which construct chain weaving as feminised work and soldering and finishing of chains as masculinised work. It is important to note that all the dominant discourses and the associated discursive practices are related and tend to have a reinforcing effect on each other.

The discourses also rely on binaries which construct women's and men's work in opposition to each other. Thus, chain weaving is constructed as low skill, light, low value, static, and a leisure activity, requiring little training, and inherently women's work. Meanwhile chain soldering is constructed as high skill, tough, high value, real work, requiring long training which allows geographical and social mobility and inherently men's work. The discursive practices which make chain weaving women's work, that feminise it, help to constitute women as unskilled, weak and socially immobile, their primary identity being as housewives. On the other hand, the constitution of masculinised soldering as skilled, high value, tough, real work with geographical and social mobility helps to constitute men as skilled, strong, as geographically and socially mobile and constructs their gender identities as providers. The practices that flow from the discourses have real effects that feed back in at a discursive level. It is also important to note that the binary construction of feminised and masculinised work which helps to create the gender identities of women and men are not neutral or equally valuable, but are linked into power relations. Men's gendered identities as breadwinners are constituted in opposition and superordinate to women's as housewives and vice versa.

5.3 HANDMADE JEWELLERY PRODUCTION IN NEPZ AND DELHI: MALE PROVIDERS, WOMEN 'HELPERS'

The major type of handmade jewellery produced in Delhi and NEPZ is plain gold jewellery sets comprising a necklace, earrings, and a ring, which are targeted to the domestic market from Delhi, and to non-resident Indians in the Gulf states and Europe

from Delhi and NEPZ. There is some production of gold chains as well. I have already discussed the production and labour processes involved in handmade jewellery production in Delhi and NEPZ in Chapter 4. However, I recapitulate the salient features here again. Handmade jewellery production is characterised by subcontracting and in migration of boys and men from the villages of Medinipur. The induction of boys and men in the workshops of Delhi and NEPZ is brought about through real and fictive kinship ties. There are no women in handmade jewellery production in NEPZ and very few women as unpaid family workers in Delhi.

5.3.1 Wages, Income and the Labour Hierarchy

The labour process in handmade jewellery production works on informal lines, whereby the owners contract out the production to a contractor, who is paid on a per gram basis. The contractor in turn subcontracts part of the work to the artisans, who are paid on a per gram basis, and gets some work done by employees on a fixed wage basis. Most artisans and employees have male child/young workers as 'helpers' and trainees. A typical male artisan/employee migrates to Delhi/NEPZ as a child/young worker aged 15 to 17, although there is great variation. He has worked as a trainee in the silver workshops of the village for between six months and two years doing chain soldering and finishing. Soldering is the common process in the two sites but migrants undergo further training in Delhi/NEPZ for two years to learn all the processes of jewellery set making.

During the course of training in the city, the child/young worker is not paid anything in cash but is provided with basic food and clothing. After being trained he has to continue to work free for his mentor for half the period of his training, typically for six to eight months. Thus a typical child/young worker would work as a trainee for between a year and a half and two years. The subsistence expenditure of a trainee assisting an artisan is borne by the artisan. For a trainee assisting an employee, the subsistence expenditure is borne by the contractor.

After the completion of his training, the trainee becomes an employee and will start getting a fixed wage, at a low level, of around Rs 800-1000 per month, increasing over time, perhaps to Rs 3000 per month. After about 2-3 years, the employee may opt to work on a per gram basis and negotiate this with the contractor, thus moving out of a wage relationship. The net margin of an artisan working on a per gram basis varied Rs.1800-5000 per month. A few artisans may reach the status of a contractor over time. The contractor's income could vary from Rs 2000-15000 per month. Thus male child/young workers and men migrating from the villages of Medinipur have the potential for much better earnings than even a contractor in Medinipur, who earned between Rs 1000 and Rs 3000[2] per month. However, this potential for better earnings in the cities was not open to the women in Medinipur.

The construction of women as 'housewives' in the villages of Medinipur, coupled with the discursive practice of seclusion of women and restrictions on their mobility, meant that none of the women migrated to Delhi/NEPZ independently in search of a job. The few

women who did migrate from the villages of Medinipur always did so to 'join their husband'. This happened when the male artisan was able to afford the rent of a single room apartment at least, where he would reside with his wife/family. A few women did get associated with gold jewellery work in Delhi, but mainly as 'hidden' workers. They worked from the confines of their homes, did not interact in the market, and their presence was denied by the male artisans. The women who migrated to Delhi would typically start to work as gold chain weavers as their husband started his own modest contracting business and used his wife as a source of unpaid and flexible labour. Thus the wives of the contractors in some cases were like a 'reserve army of labour', to be deployed at times of peak demand. Some women had given up jewellery work when the financial position of their husband improved, but had then got involved in the supervision of the artisans in the absence of their husband. The marginal presence of women as unpaid family workers in Delhi, in contrast to their absence in NEPZ, is because the domestic space of the contractor is side by side with the workshop in Delhi. In NEPZ the workshops do not have a domestic space for the contractor close by and there are restrictions on the movement of gold, which means that the contractor cannot take the gold outside the zone, to his home, and use the free labour of his wife.

5.3.2 Gendering of Handmade Jewellery Production in NEPZ and Delhi: Discourses, Practices and Subjectivities

I now take up an analysis of the different discourses which sustain a gendered labour market in Delhi and NEPZ. Different discourses are enmeshed in the discursive practices

of seclusion of women and their near exclusion from handmade jewellery production, and are tied to the gendered subjective identities of men and women. I examine the implications of the presence of women as unpaid family workers for the different discourses, which construct handmade jewellery production as 'man's work'. Though we see that many discourses, like soldering as 'tough' and as 'man's work', travel with migration, other discourses on control over moral protection of women, though popular, get transformed in the context of a few women supervising male artisans/employees, in their capacity as the wives of contractors. I examine the investment of different actors - men as entrepreneurs, contractors, artisans, employees, and women as unpaid family workers - in different discourses and how these investments shape the subjectivities and interests of the different people.

Discourse of denial

The discourse of denial of women's involvement in gold jewellery making in Delhi by the men was similar to the denial of women's involvement in silver chain weaving in the villages. However, in Delhi, unlike in Medinipur, there really were very few women engaged in jewellery production. Of the four women engaged in jewellery work in Delhi whom I was able to trace, only one interacted directly in the market and did the work of a contractor with her husband. All the others were hidden unpaid family workers. On hearing from Deepak, a worker who was still an apprentice, about the presence of a few women as unpaid family workers engaged in gold work, I approached his elder brother, Tapas, who was a contractor, to get more details about them. However, Tapas as was typical of many other men, denied the existence of any such women 'The women will not

be able to tell you anything, as much as I can tell you. What will a woman tell you? She might be knowing accounts but does not know jewellery making. There are no women artisans here.'

The above statement highlights the condescending attitude towards women and their assumed incapacity to 'know' jewellery work, an attitude common among many artisans. In denying the existence of women 'artisans' Tapas is also expressing a view that craftwork is and can only be masculinised. After much persuasion, Tapas agreed that there might be some women in the field, but added that they would not admit that they are working. He said 'It is true some husbands *make* (my emphasis*)* their wives work here as well, but they will feel ashamed to admit it'. Tapas elaborated and said that a feeling of shame is associated with women working in handmade jewellery production, because it implies the non-fulfilment of the breadwinner role by men. The subjective identities of men as providers constructed the reciprocal binary of women as housewives. When I asked Tapas whether he would like his wife to work in handmade jewellery production, he said 'She has so much household work to do - cook, wash - she has been working since very small, she also needs rest. Money is not all-important. If I have Rs 2000 balance per month it is enough'. The common assumption running through these statements is the construction of women as 'other' who have to be 'protected' and maintained, but are not considered to be adults with independent will.

Tapas was thus very reluctant to suggest the names and addresses of women engaged in jewellery making in Delhi.

Gendered subjectivities

Although few artisans liked the long hours of work, the near exclusion of women from jewellery work helped to shape their male identities. The primacy of the role of men as providers and the shame associated with their wives engaging in paid work is highlighted in the following comment of Vidur, an employee:

> It is all right for a woman to work in the confines of the home, but not outside the home. If a woman works outside it is demeaning for the husband. The village people will say, you got married and you are *making* (my emphasis) your wife work - why did you have to get married at all? If a woman is working *outside*, it is only out of compulsion, like in case the husband is a drunkard and does not take the household responsibility, only then the woman will have to think of earning for running the house.

The above statement highlights the importance of the role of a provider for male identity and for family honour. The shame that would be felt by men if their wives worked outside the home is not just the shame of poverty, but also a gendered shame, for their masculinity is built on being able to provide for their family. Wives seen to be working outside to support the family undermine the respect men can get both as men and as members of the poor working class. We notice in Vidur's statement the *village people will say...* Shame here is what Bartky (1990: 86) argues as the apprehension of being judged by others as inadequate and depends on 'the recognition that I *am*, in some important sense as I am seen to be.' Thus for men here apprehension at being judged as inadequate requires them to recognise themselves as breadwinners and providers, as they are seen to be the breadwinners in their community. Skeggs (1997: 123) writes on the concept of shame 'Shame involves a recognition of the judgement of others and awareness of social norms: one measures oneself against the standards established by others.'

Practice of female exclusion

The practice associated with the discourse of denial was the exclusion of women from the visible space of workshops. This did not just affirm the subjective identities of men as breadwinners but also contributed to the discourse of men as providers, which was popular among the Bengali village community, and in which individual artisans invested. This was one of the main drives for the exclusion of women from handmade jewellery production in NEPZ, their near exclusion from Delhi, and the denial of the few women who were engaged in jewellery production as unpaid family workers in Delhi. This shows the manner in which discourses, practices and subjectivities are mutually constitutive. The practice of excluding women from the visible space of handmade jewellery workshops gets rigidified, due to the closed nature of a labour market that is based on real and fictive kin networks.

The discourse of denial was dominant but it was also contested, as already indicated in the context of the trainee Deepak. However, when admitting that some women do work in handmade jewellery production in Delhi, the male employees/artisans/contractors marginalised the women's work as 'help'. It is to the discourse of marginalisation that we now turn.

Discourse of marginalisation

Through one of the big contractors, Sudesh, I was able to contact four women who were or had been working in handmade jewellery production, one being Sudesh's wife, Sona. Sudesh was a well-established contractor who did not seem to find it problematic to say

that his wife Sona had been weaving gold chains earlier, when he was not so well established. Sudesh also provided me with the addresses of three more women who had been or were associated with jewellery work in Delhi. Perhaps because his present subjective identity was so secure, as a successful contractor, Sudesh could speak freely of his wife's earlier work, building it into his narrative of struggling to achieve. He could tell me of the other women who knew chain work without fearing any negative social implications since his social status was so well established.

Moreover, Sudesh framed his wife's work in a particular way to avoid any sense of 'shame'. He said 'She *helped* me in the initial years. I used to give her some gold chains to weave when I started my business. She used to work from home. It is all right if women work from home. Only if they work outside, is it considered bad'. Thus, even when acknowledging the work done by his wife, Sudesh constructed it as *help* and qualified it by saying that it was done from home and was thus permissible.

Indeed all four women who were or continued to be engaged in handmade jewellery production constructed their work as *helping* their husband. When I asked Sona about her work in chain weaving, she said 'At the time we did not have a workshop. So I *helped* my husband, otherwise it would have been very difficult. He used to give me gold to weave the chain.' Suneet, who was the only woman who worked outside the home and also took jewellery to other contractors for specialised tasks, when asked about her work, said 'It is my husband's business, I am *just helping* him to run it.'

Gendered subjectivities

In constructing the chain work of their wives as *help* and not work, men invested in their subjective identities as providers, constructing women in less powerful positions as housewives. In constructing their chain work as *help* the women also reconstituted their subjective identities as housewives and those of their husbands as breadwinners. The trouble the women took to present their work in chain production as 'help' is perhaps an example of Connell's (1987: 187) conceptualisation of 'emphasised femininity', which is produced among women who view their role as naturally subservient to men. However, according to Pyke (1996: 546), 'women who emphasise their femininity may be able to wield considerable power from behind a smokescreen of female subservience.' This was especially the case with Suneet, who interacted in the market and who, after repeated meetings, admitted that she owned a house in her natal village and did have a large degree of control over the household finances.

Practice of unpaid labour

The discourse of marginalisation of women's work as *help* is tied to the practice of being unpaid. This is again tied up to the social and discursive practices of excluding women from the visible space of handmade jewellery production, and their marginal inclusion as unpaid family workers. I would argue that the material reality of being unpaid, despite the work, reinforces the discourse of work as *help,* once again feeding into the gendered subjectivities of men and women.

Discourse of handmade jewellery work as tough and as men's work

The most common discourse used by men to explain the absence of women from handmade jewellery production was that set making is too difficult for women as it is long and continuous work, requires much lung power and involves working near fire and without fans. When I asked Chaman, a contractor, whether his wife might learn to make handmade jewellery, he said 'My wife will never like to learn and do such difficult work. She does not like to do household work, leave alone any other work. It is difficult for women to work for such long hours and near fire.' Chaman constructs his wife as preferring leisure and as physically weak and lacking stamina. Although the work in handmade jewellery is tough and is done in difficult conditions, this in itself does not explain the exclusion of women. If the difficult nature of the work is the reason for the exclusion of women, how is it that one found children engaged in it?

The absence of women was also justified on the grounds of their 'natural' and primary responsibility for household and family. Salil said ' If women also start learning and doing jewellery work, who will take care of the house and the children? They neither have the time to learn nor to practice this skill.' The women's 'natural' reproductive responsibilities were deemed incompatible with the practice of prolonged hours of work and training.

The discourse of jewellery work as too difficult for women was related to arguments both about the inability of the women to do the work and to the need to 'protect' them. The exclusion of women from the visible workshop space served the material interests of the

entrepreneurs, as it eased the organisation of the workshop as a living space for men and boys engaged in jewellery production who were used as 'flexible' labour. Thus the entrepreneurs also invested in the discourses about exclusion of women. When I asked Karam, an entrepreneur, about the absence of women he said, 'No one would like their wife, mother, sister or daughter to work in the conditions of handmade jewellery production.' Although assuming a benevolent patriarchal attitude as responsible for the exclusion of women, his view does indicate that women had little 'choice', being constrained by their men folk. Women are ascribed a secondary role in the labour market and are unable to function as independent economic adults. In this context, one can clearly see the deficiency of neo-classical economics in assuming individuals as having 'free choice' and engaged in the maximisation of their utility function.

Gendered subjecivities

The constitution of set making as arduous, dangerous and requiring fortitude and physical strength helps to constitute masculine subjective identity. In performing such work, men construct an identity as strong, tough and persevering. This masculine identity is built in opposition to women's feminine identity as weak, delicate and passive.

The difficult conditions of work, used as an argument for the exclusion of women, also shaped the subjective identities of men as providers, sacrificing for their families. Many men complained of the long hours and difficult conditions of work, but considered it important to continue in the work, as they could not have got commensurate earnings in other manual jobs. Adhir, on being asked about his perception of jewellery work, said:

> I do not like this work. I have to work for long hours which is an average of 12 hours in a day, for seven days a week. Sometimes I have to work for the whole night. Sometimes I feel the strain in my eyes. Moreover the nature of the work is precarious and uncertain.

Many other artisans expressed similar sentiments, but thought they had to continue in the work as they had invested in training themselves and because it got them better money than any other job available to them. Although the earnings were rarely enough to support their family in the city, many of them did send money back home to the villages. Even the artisans who were not married sent money to their parents. This 'responsibility' for supporting their family was an important aspect of the subjective identities and feelings of self worth of men.

Practice of prolonged apprenticeship

The constitution of handmade jewellery work as tough was related to the practice of a prolonged apprenticeship period for the male child/young workers. As noted earlier, an average child/young worker has to undergo a long period of apprenticeship, during which he is paid in subsistence. The prolonging of the training period of the child/young worker helps the contractor and the artisan to reduce their labour cost, as is the case in the villages. In addition the child/young worker also takes on the tasks of daily reproductive work to sustain the artisans and employees. In the absence of women, whose work this is generally assumed to be, the labour of young apprentices is substituted. Thus Sudhir, an artisan, when talking of his apprenticeship period said:

> My mentor taught me 'raizi' [the making of small gold balls] first. I had to cook, go to the market and clean and then if some time was left I did jewellery work. Gradually I learnt small pieces. Cooking and running around took most of my time. I did not get as much time to learn.

Another artisan, Ravi Pal, described his apprenticeship of three years as follows:

> At the time of learning the work I had to undergo a lot of hardship. I used to cook, wash utensils, clean the workshop, so that for the first two and a half years I was not able to even sit to do the work. I had to even wash the clothes.

The prolonging of the apprenticeship period for jewellery set making did not just help to cheapen the labour for the contractor and take care of the daily chores but also helped to induct and orient the child/young workers in a patriarchal culture, where they were subservient to the adult artisans in their early years.

Discourse contestation

Of the four women whom I was able to trace in handmade jewellery production, only Punita knew how to make jewellery sets. However, she did not find the work particularly difficult and had learnt it in four months from her husband. The case of Punita challenges the discourse of handmade jewellery work as particularly difficult for women and needing a prolonged period of apprenticeship.

Discourse on moral protection

The discourse of moral protection and the control over the (hetero) sexuality of women was popular among the male respondents in Delhi and NEPZ. This can be discerned from an extract of my interview with one of the subcontractors Ravi Pal:

US: Does your wife know how to weave a chain?
RP: No, she does not know any of this work.
US: Do you want your wife to work?
RP: No, I do not want my wife to do any *outside* work. I do not even let her go to buy the vegetables.
US: What does she want?

RP: She thinks as I think.

The above conversation with Ravi Pal shows the extent of control of men over women in a marriage, where women are assumed to conform to the thinking of their husband. This resembles what Lukes (1974) termed power over others by 'controlling their thoughts and desires'. In this case Ravi Pal's control over his wife is manifest specifically in his control over her (hetero) sexuality by preventing her from doing any outside work.

The discourse of a need to protect the (hetero) sexuality of women as one of the justifications for the exclusion of women from handmade jewellery production was also common among the entrepreneurs. Thus, Swaroop, the owner of Glitter Jewellers, when asked the reason for the absence of women from his handmade jewellery workshop in NEPZ, said:

> It is difficult for women to work in the factory, leave alone as a production worker, for the workers are uneducated and have a very typical attitude. I had a woman typist in my unit who faced a lot of difficulties because of this and had to leave her job. Not only are the women workers unavailable in handmade jewellery but even if they were available, I would not like to hire them because of the problems of management it will create for me.

Here Swaroop is referring to the sexism and chauvinism of the male workers. However, the solution of Swaroop to keep women away does not challenge the attitude of the workers but feeds into it.

Practices of female seclusion and exclusion

The discourse of a need for moral protection of women and the practices of seclusion and exclusion of women were mutually constitutive. The practice of seclusion of women in

Delhi restricted the mobility of women and prevented them from learning and working alongside men in the workshops. An important question in the context of the discursive practices of seclusion and exclusion of women is whether a communal work environment and communal living is a necessary aspect of handmade jewellery production, and whose interests this system of work organisation serves?

In this context many artisans said that the communal work environment was important because they had to share the tools. For the contractor this meant an economy on the tools he needed to provide. The communal living of the artisans also served the interests of the contractor, for it provided him with flexible labour which could work for as long as twelve hours in a day. For the artisans and subcontractors the low level of wages and margins meant that co-residence was the only option available. On the other hand, this system of work organisation also benefited the entrepreneur indirectly, for the system of subcontracting relieved the entrepreneurs from supervision of the artisans, and the 'solution' found by contractors to 'cheap' and 'flexible' labour enables the entrepreneur to keep accumulating. Thus, though women are cheaper than male labour in Medinipur, their exclusion from the visible space of workshops, in NEPZ and Delhi, helped the contractors and entrepreneurs to organise work in an environment where they could extract huge labour surpluses from male artisans, employees and child/young workers. In this context, the exclusion of women from the visible workspace helped to serve the material interests of the contractors and entrepreneurs.

Gendered subjectivities

The all-male communal work environment was also important for men in order to keep their dominant masculine image and power intact at home. This becomes clear through a remark of Tarun, a subcontractor in Delhi, who had returned to the village after incurring losses:

> Set making requires many tools and is difficult to do at home. It is better to keep the workshop and home separate. The workshop should be separate from the house. So many people come to the workshop, at times they are rude to me in case the delivery is delayed, I would not like my wife and my family to witness these interactions.

Thus for the construction of home as a private space where men rule, it was important for the male artisan to prevent members of his family from witnessing his engagement in the workshop or factory, where he does not have absolute authority.

Discourse contestation

However, the necessity of a communal workspace for handmade jewellery production is questioned by the case of Punita, an unpaid family worker in Delhi who learnt and made jewellery from within the home.

Another issue that arises in the context of the seclusion and control over the (hetero) sexuality of women is whether the four women working in Delhi posed a challenge to the existing discourse. Of the four, only one, Suneet, interacted in the market, and broke the traditional norms of seclusion. What is interesting is that the discourse of sexual morality and the practice of women's seclusion did not apply in the case of contractor's wives supervising the employees in the workshops. Of the four women interviewed, three were

engaged in the supervision of male artisans in the absence of their husband. These artisans worked and resided in the workshop which was an extension of the home of the contractor. Here the gendered identity of women as contractor's wives as well as their higher class position meant that the male artisans respected them. According to Sona 'If these workers make a noise while working, I have to just tell them loudly to be quiet and there is complete silence. They listen to me better than even the manager.' In this case the reinforcement of their gender ascriptive role as contractor's wife, which places the women in a higher class position in relation to the male artisans, empowers the women such that the male artisans are in awe of them and respect them. Contractor's wives supervising the male artisans, living in adjacent spaces of the workshop, show the manner in which the discourse gets transformed in different contexts.

The gendering of handmade jewellery production in Medinipur, Delhi and NEPZ has certain commonalities and also some differences. The three sites are related through migrations from the villages of Medinipur to Delhi and NEPZ. The discourse of the male breadwinner and the 'housewifisation' of women is common in all the sites of handmade jewellery production and constitutes the subjective identities of men and women. I would argue that 'male breadwinner' and 'female housewife' are like domains to which individual discourses circulating in different sites of handmade jewellery production belong. This leads to the invisibility of women's work as homeworkers in Medinipur and their marginal presence as unpaid family workers in Delhi. Kondo (1990) argues that the process of enacting, embodying and performing various acts of production at work creates gendered identities. Thus in performing soldering and finishing of chains in the

villages of Medinipur, work constructed as 'tough', 'skilled' and 'real', men construct their masculine identities as breadwinners in terms of 'toughness' and 'skill' making 'real men'. On the other hand chain weaving is constituted as 'light', 'unskilled', and as a 'leisure activity' and in doing chain weaving the feminine identities of women as housewives are constructed as 'tender', 'unskilled' and 'leisured'. Moreover, when women cross the gendered boundaries of work and engage in chain soldering and finishing, their gendered identities do not change but are reconstituted by constructing their soldering work as 'help' to their husband.

The construction of the male identity of breadwinner and of women as housewives, in combination with the discourse of control over the (hetero) sexuality of women, mean that none of the women migrate to the cities in search of work. Of the few who migrate as wives of the male migrants, some take up the work of gold chain weaving from the confines of their domestic space in Delhi. Handmade jewellery set making entails soldering which is a skill that most of the male artisans learn in the villages. The constitution of soldering as tough transfers to jewellery set making, also deemed as tough work, which again helps to constitute the masculine identities of men as tough. The discourse of jewellery set making as tough, the masculinised culture of the workshop and the discourse of moral protection of women mean that women are excluded from the visible space of the workshop. However, the discourse of seclusion is transformed in Delhi to allow wives of contractors to supervise the male artisans /employees, working and residing in workshops adjacent to the home of the contractor. Unlike Medinipur, where women get entitlement to their earnings and work as homeworkers in chain

weaving, the few who do work in Delhi are unpaid family workers and their work is in all cases constituted as 'help' to their husbands.

5.4 MACHINEMADE JEWELLERY PRODUCTION IN NEPZ: DELICATE WOMEN, TOUGH MEN

In this section I take up the discourses and discursive practices that help to constitute the gender division of labour in machinemade jewellery production, and the manner in which they construct the masculine and feminine identities of men and women workers.

As detailed in Chapter 4, machinemade jewellery production involves making a masterpiece in silver or a base metal, replicating it through casting in wax and then gold, followed by stone studding, filing, polishing, plating and packing. There is quality control of production at each stage after casting is undertaken. Men predominate in master making, gold casting, stone studding, filing, polishing and plating. Women constitute nearly 25 percent of the aggregate workforce of machine jewellery production and are largely segregated in the wax casting, quality control and packaging departments.

5.4.1 Wages and the Labour Hierarchy

Chapter 4 also noted wide variations in the wages of women across different companies, such that the inter firm differences in wage levels for women exceed the intra firm differences between women and men. Of the ten men and twenty-seven women

interviewed, the average wage of men at Rs. 2771 per month is about eighteen percent higher than the average wage of women at Rs. 2343 per month. However, the number of respondents in each company would affect the average figure. As discussed before, although women were not necessarily the cheapest source of labour, the wage levels in the wax casting departments, where women were in the majority, were the lowest in all the companies. However, some women supervisors did earn better wages than some men in polishing or filing. Wage discrimination between women and men was not clear-cut, not least because the gender division of labour posed comparability problems. However, there were clear differences in the status of men and women. Perceptions of skill, transferability of some skills to the handmade jewellery sector and a policy of keeping women as 'permanently casual' in some companies advantaged men as a group over women as a group.

There were only two instances of formal training revealed by my interviews. At Chandra Jewellers both men and women were recruited to the stone studding department for six months of training. The posts were advertised in the newspaper, and the trainees were required to make a deposit of Rs. 2500 and were paid an allowance of Rs 750 per month. Upon completion of their training, however, the women recruits were transferred out of stone studding to the wax casting and quality control departments. The other instance of formalised training was the case of recruiting women trainees for wax stone studding for a period of three months in Pratap Diamond Jewellers. These women served as a rotating pool of workers, as many of them were terminated at the end of the training period.

I next take up the categorisation of male and female workers by skill in different companies, based on the company survey results. Some questionnaires were filled in at the time of the interview with the entrepreneurs/management, while others were received by post. Interviews with the entrepreneurs/management showed that the skill categorisation by the management in many cases is not based on government legislation on skill, indeed many entrepreneurs/managers said that they were not aware of any such skill categorisation by the government. Instead the managers filled in the questionnaire according to their perception of skill, and in many cases tied this to the requirements of training. Table 5.3 shows the categorisation of skill of all male and female workers in different companies.

As we can see from Table 5.3, of the total male workers, 33.6 % are categorised as skilled workers. On the other hand, of the total women workers, a negligible level of .01% are categorised skilled, all in the same company, Chandra Jewellers. There are large variations in the number of men categorised as skilled workers across the companies, from 17.8% to 100%. Of the total male workers, 45.6% are in the semi-skilled and 20.7% in the unskilled category. Of the total women workers, 65.5% are in the semi-skilled and 33.1% in the unskilled category.

Male workers are 75% of total workers so they are over represented at 98.6% of the skilled workers and underrepresented at 67.6% of the semi-skilled and 65.2% of the unskilled workers. On the other hand, there is a vast under representation of women at 1.4% of the skilled workforce in relation to their overall representation of 25%. Women

are over represented in the semi-skilled and skilled categories, at 32.4% and 34.8% respectively.

Table 5.3 Categorisation of Workers in Machinemade Jewellery Production by Skill

Name of the Company	Skilled		Semi Skilled		Unskilled		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
Raghav Jewellers	30 (100%)	0	0	5 (100%)	0	0	30 **(85.7%)**	5 **(14.3%)**
Dimple Jewellers Ltd	20 (30.8%)	0	30 (46.15%)	10 (66.7%)	15 (23.1%)	5 (33.3%)	65 **(81.25%)**	15 **(18.75%)**
Victor Jewellers Ltd	17 (28.3%)	0	27 (45%)	10 (40%)	16 (26.7%)	15 (60%)	60 **(70.6%)**	25 **(29.4%)**
Chandra Jewellers Ltd.	20 (25.6%)	2 (20%)	16 (20.5%)	0	42 (53.8%)	8 80%)	78 **(88.6%)**	10 **(11.4%)**
Bharat Ratna Jewellers Ltd	16 (17.8%)	0	74 (82.2%)	34 (100%)	0	0	90 **(72.6%)**	34 **(27.4%)**
Pratap Diamond Jewellers Ltd.	40 (39.2%)	0	47 (46.1%)	34 (64.15)	15 (14.7%)	19 (35.85)	102 **(65.8%)**	53 **(34.20%)**
Total	143 (33.6%) **(98.6%)**	2 (.01%) **(1.4%)**	194 (45.6%) **(67.6 %)**	93 (65.5%) **(32.4%)**	88 (20.7%) **(65.2%)**	47 (33.1%) **(34.8%)**	425 **(74.96%)**	142 **(25.04%)**
Total (both sexes)	145		287		135		567	

Note: The figures in plain brackets are the percentage of skilled, semi skilled or unskilled female or male workers to all female or male workers in each company. The figures in bold brackets are the percentage of female or male workforce to total female and male workforce in each category respectively.

Source: Based on the company questionnaires, May 1996- January 1997

I next take up an analysis of the discourses which constitute and are in turn constituted by a labour hierarchy and a gender division of labour, and their relatedness to the gendered subjective identities of men and women.

5.4.2 Gendering of Machinemade Jewellery Production in NEPZ: Discourses, Practices and Subjectivities

It is important to note that unlike handmade jewellery production in Medinipur and Delhi, women in machinemade production worked in the visible space of the factories and there was no discourse of denial of women's paid work. Nor was there a discourse on the need for moral protection or control over the (hetero) sexuality of women. The tasks were constructed as suitable for women or men according to essential biological differences. In most cases neither had much 'choice' over their section of work. However, by investing in the discourses on masculinised and feminised jobs, men and women constructed their masculine and feminine subjectivities.

Discourse of polishing, stone studding and filing as tough

The most important discourses provided by the entrepreneurs and managers for the inclusion of men and exclusion of women in the casting, polishing, stone studding and filing sections rely on gender essentialism. These jobs are constructed as tough and therefore suitable for men, who are essentialised as strong, and unsuitable for women, essentialised as weak. According to the manager of Bharat Ratna Jewellers 'Filing,

buffing and plating are male dominated operations as filing and buffing are considered heavy and plating involves use of chemicals.' According to the manager of Dimple Jewellers 'Women are absent from polishing because force is required while buffing and grinding. One has to push the piece against the wheel. So the strain is felt by the shoulders and it is quite physically oriented.' Regarding the absence of women from casting he said 'Casting is done at very high temperatures. For example the furnace is at 700 degrees centigrade and molten metal is at 1000 degrees centigrade. So we prefer men there.'

Male workers also relied on the binaries of tough/light to constitute their work in the former category and that of the women in the latter. According to Hari, doing polishing in Bharat Ratna, 'Polishing is dangerous and tough work. I used to even burn my hands with the friction produced by the barrel earlier. It is not a woman's job.' As noted in Chapter 4, master moulds are made primarily by men who have had experience of working in handmade jewellery production. Thus the discourses and practices which exclude women from handmade jewellery production are also pertinent to their exclusion from master mould making in machinemade jewellery production. Lalit, a master maker, when speaking of the absence of women from master making said 'Soldering, wiring, drawing a wire, all this requires power. Beating the metal with a hammer, melting the metal. This is tough. Not everyone can do it.' Here Lalit uses the term 'not every one' to refer to women, constructing them as different and the 'other'.

The material element of this exclusion is clear in the statement of Pradeep Nayak, a mastermaker in Pratap Diamond Jewellers:

> Women might be able to make a master, but if we allow women entry into handmade jewellery production and thereby in master making, our wage levels and conditions of work will go down, for women will be ready to work at low wages and accept worse conditions of work, like working free for overtime. This will also render some of the male artisans unemployed.

Most women workers also invested in the discourses that master making, casting, polishing and studding are tough work and as such men's work. Some, like Purnima, went on to describe the difficult aspects of the work: 'In the case of finishing the machine gets very hot when operating it and can cause friction in the nails and hand'. When Roopa, who was a wax department supervisor, was asked to comment on the management policy of a rigid gender division of labour, she argued that these jobs are more suitable for men than women as they involve use of muscle and strength.

A brief consideration of women's reproductive work in India readily undermines their apparent unsuitability for the work. When so many women in India are involved in drawing water from wells and carrying it over long distances, why should the semi automated process of polishing be particularly heavy? Moreover, a large part of women's time is spent near the hot stove and open flames in the kitchen, so why should working near a hot furnace be particularly tough?

Gendered subjectivities

Here the narrative of the tasks as 'dangerous', 'tough', 'difficult' and physically oriented helps to constitute the masculine subjectivities of the men who perform these tasks as

'brave', 'tough', 'strong' and 'muscular'. These are built in opposition to the feminine identities of women as 'timid', 'tender', 'weak' and 'delicate'.

Practice of exclusion of women from 'men's jobs'

The virtual exclusion of women from master making, which is tied to their exclusion from handmade jewellery production, serves the dual interests of the male artisans, reinforcing the role of women as housewives on the one hand and helping to avoid any job competition from women on the other. This gave men a monopoly in master making, the job which was constructed as the most skilled and was the most highly paid, and so limited the opportunities it could afford women not to need to depend financially on men. The discourses on casting, polishing and stone studding as tough and as 'man's work' constructed the practices of exclusion of women from these tasks, which were again tied to power structures, as these tasks were constructed as better skilled and offered better prospects and job mobility.

Discourse of wax casting, packing and quality control as 'light work'

Working in parallel to the discourses justifying women's exclusion from master making, stone studding and filing were those justifying their inclusion in wax casting, packing and quality control. According to the director of Raghav Jewellers, women are suited to distribution and quality control as they are more cautious with the pieces. As to the preponderance of women in the wax department, particularly in injection, cleaning and tree formation, the popular discourse among the managers and entrepreneurs was that it is 'light' work and is thus suitable for women. Packaging was constructed as 'routine' and

'easy' work. The managers again focussed on essentialising the physical and mental attributes of women. According to the production manager of Dimple Jewellers, women are suitable for wax cleaning as they have delicate hands and can do delicate work. Naveen, the production manager of Chandra Jewellers, when contrasting waxwork, where women predominate, with casting, where there are no women, said 'Waxwork is simple as it involves working on a single machine. On the other hand casting involves management of many operations on different machines. Casting is done by men and is a tough job.' Bharat, the General Manager of Bharat Ratna Jewellers, said that girls were preferred in the wax and quality control departments because they are sensitive to the delicate designs. According to Karan, the director of Raghav Jewellers, women are good in distribution and quality control, as they are more cautious with the pieces and have an eye for detail.

Ascribing the suitability of women to wax work and quality control to their sensitivity to design seems curious, for none of the women seemed to be involved in any innovative designing in the wax department. However, those in quality control did seem to have decision making power and there could have been some correlation of the supposed sensitivity to design with quality control.

Women respondents also relied on essentialist ideas to explain their preponderance in the wax department. Most took pride in their work, stressed its importance in the process and thought that men would not be able to do it as well. As Roopa explains 'Wax is very soft and requires soft handling. Girls have soft hands and can handle it well. If it is given

in the hands of men there is a fear of it breaking with pressure'. Purnima expressed a similar view: 'Wax is soft and is to be handled softly. Men have got hard hands and if they are impatient they can spoil the wax moulds - they might open it too quickly. This can spoil the pieces.' Amita confirms that 'Yes women are mostly found in the wax department. Actually gold and silver are hard for women to handle.' According to Purnima 'Quality control is good work, light and clean, as it *should be* (my emphasis) for a woman. But women are not asked the choice of the department and we have to go in whichever department the management decides to post us.'

Gendered subjectivities

In these cases the investment of the women in the essentialist gender discourses means that they are unlikely to contest their position and helps to construct their feminine identities. Investing in the discourses on the gender division of labour allows women to confirm their femininity through an emphasis on keeping their hand soft, not damaging their nails and recognising their delicacy of touch. Implied in the suitability of wax work for women, requiring repetitive operations on a single machine, and of packaging as routine and easy work is the idea of women's stasis, immobility and patience.

One could question whether quality control work done by women posed a challenge to men's masculinity? By making decisions about the quality of the piece, women could indicate the piece as faulty, which meant that the piece had to be taken back to the relevant department and either corrected or redone. However, the quality control was a separate section and women did not directly interact with the men in different sections.

Thus, the men did not face a challenge to their masculinity or self worth through the direct control of their output by the women in the quality control department. The organisation of different work tasks thus ruled out any possible challenge to male masculinity which women engaged in quality control could pose.

The 'eye for detail' which women learn through performing tasks like sewing and cleaning grains is essentialised as the natural trait of femininity and helps to constitute feminised jobs. This is similar to the construction of assembly jobs as suitable for women in the electronic factories of the multinationals in SE Asia and Latin America in the 1960s and the '70s because of their 'natural' dexterity (Elson and Pearson, 1981).

Many women workers were aware, notwithstanding 'self-selection' for jobs in wax casting or quality control, women had little or no opportunity to enter other departments. The rigidities of the gender division of labour meant most were active in fighting for better work conditions in their existing jobs.

Crossing the boundaries of the gender division of labour?

All the above makes the few cases I came across when the boundaries of the gender division of labour had been crossed especially interesting. In Dimple Jewellers there were three men working in the wax casting department, two of whom were in mould cutting while the third was the supervisor. However, since mould cutting was considered the toughest job, as it involved cutting the mould with a sharp knife, this example does not undermine the dominant discourse. In Pratap Diamond Jewellers, stone studding was

carried out on wax cast pieces and only women were recruited to this work. The preponderance of women in wax stone studding, in contrast to their total absence from metal stone studding, was justified by the managers on the ground that wax stone studding involved pushing an exact sized diamond in a small channel, work which required an eye for detail and a lot of concentration and for which women were suitable. The women were taken on as a rotating pool of workers, many of them having their employment terminated before the completion of three months of probation. The next batch of women trainees was then taken on when demand rose. The issues of the link between feminisation and flexibility, which these policies raise, will be taken up in the next chapter.

Perhaps a more significant example of boundary crossing is found in Chandra Jewellers, where both men and women had been recruited as trainees in the metal studding section. However, on completion of training all the four women involved were transferred to the wax casting department, as Naveen, the production manager of Chandra Jewellers, explains:

> Setting could be of various types - grain setting, prong setting and metal setting, of which women were given relatively easy setting operations mainly to do with metal setting. However, women were slow to learn and training women for setting took seven months in contrast to four months for a male worker. Later we thought that women are not really fit for this job and transferred them to the wax casting department.

Thus although the company recruited both men and women as trainees in the stone studding section, the management had an inherent gender bias as to their capacities and women were trained only in metal setting, which the management considered easy.

Subsequently the management reinstated the gender division of labour by transferring women to the wax casting department. The grounds cited are that women took longer to learn the work, but why then did the management decide to transfer the women only after the training was over?

Discourse contestation

One of the four workers, Mrinalini, protested against her transfer, but management did not reverse its decision. According to Mrinalini:

> Women are not less than men in any work. When we were trained in setting, why were we sent to the wax casting department? When we came here initially we were told that women can do any work and that metal setting is hard, but that we could do it. However, I did not find it particularly hard. So what we resented was why were we then transferred to the wax casting department. They told us we should also learn to diversify our skill.

Mrinalini also said that although the initial wage levels were the same in the wax casting department as in stone studding, the future promotions up the pay scales were much less.

From an analysis of the discourses on male work we notice that the masculinised jobs of master making, gold casting, polishing, stone studding and filing are constructed as dangerous, difficult, complex and tough work. The performance of these tasks helps to construct the gendered subjectivity of men as bold, tough, and dynamic. The feminised jobs in the wax department and in quality control are constituted as light, simple, repetitive, routine, detailed, soft, and static. Women who perform these tasks get constructed and construct themselves as delicate, patient, nimble fingered, and immobile. Again one notices the duality in the constitution of masculinised and feminised jobs as

dangerous/safe, complex/simple, tough/easy. The performance of these jobs constructs male and female gendered identities in oppositions - bold/delicate, tough/ nimble fingered, dynamic/immobile. These oppositions are power laden, and help to construct men as superior to women. The discursive practices of a gender division of labour help to differentiate women and men on the basis of wages, skill, requirements of training, permanency and promotion. Next I take up the construction of skill in relation to gender.

Discourses on skill and training

The gender division of labour is tied to a discourse that many jobs defined as male are skilled and almost all jobs defined as female are semi-skilled or unskilled. The discourse of male jobs as more highly skilled than female jobs meant a greater proportion of men represented as skilled workers than women, as has been outlined in the earlier section. Even women managers like Deepa Sharma, the export manager of Victor Jewellers, invested in this popular discourse:

> Masterpiece making, setting and designing was all considered skilled work. However, in case of setting, quantity and quality were considered before categorising a person as a skilled worker. The unskilled category workers were involved in filing, wax and packaging sections. Women were not found as skilled workers because they were not available.

This statement raises two broad questions - one concerning the male bias inherent in the concept of skill and a second concerning the investments of different actors in maintaining a gender division of labour, which is tied to a power hierarchy, whereby male jobs are considered more skilled and better valued than women's jobs.

According to the director of Dimple Jewellers, Manoj: 'Women workers are less productive than men, as "skilled" workers and supervisors because they lack concentration and are mentally preoccupied with their household responsibilities. However, they are more productive than men as "semi-skilled" or "unskilled" workers'. This statement reveals a great deal about the male bias in decisions about what constitutes 'skill'. If women lack concentration to do the 'skilled' jobs, how do they get the concentration to do the 'delicate', 'detailed', 'dextrous' jobs which are classified as unskilled jobs? This leads us to the argument that women's job are 'unskilled' because they are done by women, who are secondary workers and are not socially recognised as 'breadwinners' (Phillips and Taylor, 1980; Elson and Pearson; 1981). Skill categorisation is often tied to requirements for training. I found in the course of my research that training is a fluid concept, interpreted differently by different people and varying in its usage. However, the discourse of tasks done by male workers as skilled and requiring training is popular among managers and constituted the dominant discourse. For the owner of Raghav Jewellers, Karan, casting is not a woman's job because it requires the person to be strong, healthy and also requires training. It is important to note that while Karan rejected the need for any 'real training' for women in the wax department he also admitted that he tries to prolong the 'trainee' status of women in order to prolong also their casual status. According to Naveen of Chandra Jewellers 'We assign men to skilled jobs, which require training. Women are in wax and quality control, which are routine jobs and need little training'. According to Shrinivas, the manager of Pratap Diamond Jewellers Ltd, 'Women are assigned to easy tasks, which take a day or two to learn, for

they do not have to think of wage work as a career. But for men on the shop floor, training could be a life time investment.'

The common assumption in the dominant discourse of the managers is that women do jobs which do not require training. Another way of looking at this is that women bring skills that they have already acquired to the job. Elson and Pearson (1981: 93) note that the 'nimble fingers' of women workers in electronic and textile factories are not natural but the result of training received from their mothers and other female kin in tasks which are deemed socially appropriate like sewing. A similar argument could be applied to the 'nimble' and 'delicate' fingers women bring to wax casting. Similarly the much-desired 'eye for detail' required for quality control is not a natural trait of women but the result of informal training in household tasks like cleaning grains, needle work, and knitting.

The perception of women as to what constituted their training period varied across the respondents. According to Alka, working in the wax department of Dimple Jewellers, 'I started working in the department after observing other women do it for a day or two. I think that constitutes my training period.' On the other hand, for women like Purnima, training constituted the entire six months when she perfected the cleaning of wax pieces. Male workers perceived their training to be longer than that of female workers. Lalit, who had moved from handmade jewellery production to master making, said 'I have been doing hand jewellery work for the last twenty years, so it took me a few days to make a master, but for men who are trained in master making in the company, training would

take more than a year.' Manav of Dimple Jewellers felt that he was continuing to be trained after nearly three years of working in the plating section.

Gendered subjectivities

The discourses of men's work as 'skilled' and as 'requiring training' constitute male subjective identities as 'skilled' and as 'providers'. The opposing discourses of women's work as 'unskilled' and as 'requiring little training' constitute the subjective identities of women as 'unskilled' and as 'secondary earners'.

Practice of differential training and categorisation of skill

The logic deployed to explain women's absence from the skilled categories of work is circular. Master making and stone studding are essentialised as 'male work' and are defined as 'skilled'. This leads men as workers and employers to exclude women from these jobs, which in turn feeds into the discourse that women are not found as skilled workers. This is again an example of how discourses and practices are mutually constitutive. The minority of women in management did not differ from men in their discursive position on the skill categorisation of workers.

The dominant discourse that men need training and women require little training was tied to the practice of sending men on training courses in organisations such as the Gems and Jewellery Promotion Council, and of categorising their work as skilled in relation to that of women. I have already mentioned the case of Raghav Jewellers, where women were kept as trainees on a prolonged basis to reduce the wage costs and to continue their casual

employment status. Dimple Jewellers followed a similar policy. Pratap Diamond Jewellers recruited women as trainees in the wax studding section for a period of three months, at the end of which a majority were terminated on the grounds that they had not learnt the work. Thus the meaning and effect of training differed for men and women. For men it served as a means of valuing their work and categorising them in higher skill categories. For women it served to prolong their casual employment status and low wages.

In the above section I have discussed the discourses and practices that constitute the gender division of labour followed by the companies. Jobs in the wax casting and quality control departments are essentialised as women's jobs, are relatively low paid, considered unskilled and are casual in nature. On the other hand jobs in master making, casting, polishing and filing are essentialised as male and are better paid, are considered 'skilled', are more stable and have better promotion chances. Not only do the discourses on masculinised and feminised tasks help to constitute the gender division of labour, they also construct the gendered identities of men and women.

5.4 CONCLUSIONS

This Chapter has analysed the role of discourses, discursive practices and feminine and masculine subjectivites in gendering the labour market in jewellery production in different sites and types of jewellery production. In all cases masculinised jobs are constituted in opposition to feminised jobs, and the performance of these jobs helps to

construct male gendered subjectivities in opposition to those of female, a binary which is tied in with power dynamics.

The discourses on seclusion and moral protection of women circulate among actors in handmade jewellery production in the villages as well as in Delhi and NEPZ. In the villages of Medinipur women are in preponderance as hidden homeworkers in chain weaving. The constitution of chain weaving as an unskilled, static, leisure activity and the construction of wages from chain weaving as pocket money, helps to construct the subjective identities of women as housewives. The construction of women as housewives means that none of the women migrate to cities in search of work. In contrast, soldering and finishing are constituted as skilled, tough, real work, the performance of which constructs male identity as breadwinners, socially and geographically mobile. The discourses on handmade jewellery set making as tough, the practices of prolonged training for the male children and the cohabitation of artisans in the workshop constructs handmade jewellery production in Delhi and NEPZ as 'male work'. Of the few women who do migrate to Delhi to join their husbands, some work as unpaid family workers mainly involved in chain weaving, from home. However, the discourses of seclusion and moral protection of women change in the context of these women, as wives of contractors supervising male artisans and workers. There is a total absence of women in NEPZ, as the workshops do not have a domestic space for the contractor, as in Delhi, so his wife cannot work as unpaid labour.

In machinemade jewellery in NEPZ, men are in predominance and work in the master mould making, gold /silver casting, stone studding, polishing and filing sections. Women constitute a minority of nearly one fourth of the labour force and are segregated in wax casting, quality control and packaging sections. The discourses on the masculinised work of master making, gold casting, stone studding and polishing constitute these jobs as tough, heavy and difficult, in contrast to the feminised work of wax casting and quality control which are constituted as delicate, light and easy. The performance of masculinised tasks constructs male subjective identity as tough, strong and bold and the performance of feminised tasks constructs female subjective identity as nimble fingered, delicate and soft. The gender division of labour is tied to underlying material power dynamics whereby male jobs are considered more skilled, are at higher wage levels, are more stable and have a 'career structure', whereas women's jobs are considered unskilled, are at lower wage levels and are static.

The important point to note in the context of the three sites and two forms of jewellery production is that the gender demarcations and differences are recreated by men to sustain different degrees of control over women and to sustain a gendered power hierarchy. Women respond to these 'differences' positively, negatively or both.

The labour process theory of Braverman (1974) has argued that development of Tayloristic methods of scientific management leads to 'deskilling', 'homogenisation' and 'feminisation' of the workforce. In my case study, the varying patterns of incorporation of women in handmade jewellery production implies that one cannot talk of degradation and feminisation of the labour force. However, one could talk of feminisation of the visible

labour force in the sense of an increase in the proportional representation of women in the visible work force in relation to men in machinemade jewellery production, as compared to handmade jewellery production in NEPZ, Delhi and Medinipur. However, if one takes account of the hidden women in the villages of Medinipur, in terms of labour hours chain weaving constitutes the most labour intensive part of the production process, and accounts for nearly 64 percent of the total time required. By that calculation women are the majority work force in the village production of silver chains in Medinipur, and there is a masculinisation of handmade jewellery production in the urban locations in Delhi and NEPZ. There is a reintroduction of women in machinemade jewellery production in NEPZ, where they represent nearly one fourth of the labour force.

However the machinemade jewellery production has not replaced handmade jewellery production and there is a coexistence of the two, as they cater to different segments of the market. While the handmade jewellery exports are directed to the non-resident Indians, in Gulf countries and in the U.K, the machinemade jewellery is directed to the European consumer.

If we compare the gender composition of the work force in machinemade jewellery production with that of handmade jewellery production there is a minority presence of women in machinemade jewellery production in comparison with their complete absence as own account workers in handmade jewellery production in NEPZ. However, this cannot be read as a straightforward case of deskilling and feminisation. Firstly because the concept of 'skill' is itself problematic and gendered, as noted by Phillips and Taylor

(1980). Thus the incorporation of women in the wax casting and quality control departments is related to the use of 'women's skills', like 'nimble fingers' and an 'eye for detail'. Secondly the incorporation of women in machinemade jewellery production does not substitute for a male workforce. There is a transferability of the skills of male artisans from handmade jewellery production to machinemade jewellery production and their incorporation as master makers. Here the retention of the monopoly of men in the 'skilled' category of master making is not through the presence of a trade union but through the discursive practices of closure used by the male artisans against women, as in the case of the print industry in Britain studied by Cockburn (1983). This serves men's material interests and constructs their subjective identities as breadwinners, as discussed earlier.

As noted in Chapter 2, the concept of feminisation as characterised by low paid, irregular, part time labour contracts for women, alongside technological change, does not hold true for my study. This concept of feminisation has applicability in the context of industrialised countries, where technological changes are in the nature of moves from Fordism to post Fordism. The evidence in my study does not indicate an increase in the decentralisation or irregularity of work in machinemade jewellery production as compared to handmade jewellery production. In fact there is a greater centralisation and regularity of work in machinemade jewellery production as compared to handmade jewellery production. The move from handmade to machinemade production shows women moving from homeworking to regular employment status in the factories. All the work in handmade jewellery production is based on subcontracting whereas machine jewellery production is based on regular employment contracts. However, there is

evidence of casualisation of women in some companies, stagnancy in the wage levels, lengthy trainee status, and, in one company at least, there is evidence of taking women on as a rotating pool of workers, deployed or retrenched according to the requirements of production.

One of the meanings of feminisation in the literature, as noted by Chachhi and Pittin (1996: 7-8), is the increase in women's involvement in 'invisible' work i.e. family labour and homeworking. The above analysis sheds light on the dynamics of the construction of 'homeworking' and 'unpaid family labour' as women's work. The important point to note is that women work in the confines of their homes in Medinipur and Delhi not just because they can fit in their domestic chores with jewellery work, but also because the 'invisibility' of their work helps to reinforce the subjective identities of men as breadwinners and maintain their control over women's (hetero) sexuality.

As noted in Chapter 2, the ILO's (1995: 5) definition of homework rules out the inclusion of self employed workers. The definition notes that the work be carried out without direct supervision by the employer or the contractor, so that by this conceptualisation the work done by the male artisans and employees in NEPZ and Delhi, under the overall supervision of the contractor, cannot be categorised as homework. However, to the extent that most of the artisans working in NEPZ and Delhi reside in the workshops, the workplace is home for most of the male artisans.

The characteristic difference between the 'homework' and 'unpaid family work' of women and the work of the male artisans is that whereas women work from home because of the discourses around seclusion and housewifisation, for male artisans their workshop is home because of their inability to afford a rented accommodation. In the next chapter I take up the analysis of the relationship of flexibility to the gendering of work.

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[1] He gave me these estimates on my follow up visit: in an earlier visit he said that he was paid only Rs 300 per kg of silver and that his costs were Rs 250 per kg, leaving a profit margin of just Rs 50 per kg.

[2] The upper limit of income of the contractors in Medinipur would go up if we account for the underestimation of profits by Nikhilesh, the contractor who gave his upper income figure level to be Rs 3000.

CHAPTER SIX

FLEXIBILITY AND THE GENDERED LABOUR PROCESS

6.1 INTRODUCTION

This chapter addresses the issues raised in the flexibility debate in the literatures reviewed in Chapter 2, in the context of my study of the jewellery sector. Much of the debate on flexibility has emerged in the First World countries and is cast in the context of the production systems in those countries. In the Third World countries, the 'Italian' form of flexibility has greater applicability (Morris and Lowder, 1992). The high technology model of flexibility, conceptualised as the 'second industrial divide' by Piore and Sabel (1984), has little applicability here. Artisanal modes of production, subcontracting small firms and independent small firms are more popular forms of flexibility in the case of the Third World. In my study of jewellery production in India, I found that contracting out is the popular form of work organisation in the villages of Medinipur. In the urban context I found small firms producing handmade jewellery subcontracting to workshops in Delhi and carrying out production on the basis of contractorship with the factories of NEPZ. Such patterns of subcontracting make for flexible labour markets. Only in the case of machinemade jewellery production in NEPZ is there an absence of contracting/subcontracting, and the workers work directly for the entrepreneur. In this case the firms achieve flexibility by keeping workers on a casual status for a prolonged period.

The production systems of jewellery in the three sites do not represent a post Fordian break in production i.e. a shift from mass production to niche production in flexible labour markets. The artisanal mode of production of handmade jewellery in the villages, and in Delhi, is an informal mode of production, which has existed for a long time. As noted in Chapter 4 one of the companies, Kunal Jewellers, was set up as early as 1880. The more recent production system of machinemade jewellery in NEPZ, on the other hand, is close to mass production. The focus of the analysis is thus not on the changes in organisational and labour market structures as much as the structures which have been in existence for some considerable time and the nature of the flexibility they entail for different actors.

Elson (1996: 36-37) has succinctly brought out the three concepts of flexibility - functional flexibility, numerical flexibility and financial flexibility. Here functional flexibility refers to the flexibility of work across job boundaries, numerical flexibility to flexibility in hours of work and financial flexibility to the flexibility in the costs of employing labour. Most of the debates on flexibility focus on the supply side and the issues of organisational flexibility, labour market flexibility and functional flexibility in the context of the entrepreneur. Some of the literatures explore the implications of labour market flexibility for labour. However there is little in the literature on the experience of flexibility for different actors between the entrepreneur and labour in the production hierarchy. My study goes beyond the employer - worker dyad to examine the issues of flexibility raised in the literature in the context of all the intermediate actors involved in the various forms of production relations. Some of the actors are involved both in

organising the production process and being a part of it through their own labour. Thus contractors may employ or subcontract labour to meet the contract but also labour themselves. This complicates the analysis of flexibility in the context of handmade jewellery production in the three sites. There are three dimensions of flexibility here. They are:

- The flexibility an actor derives from others in the labour hierarchy, which may be financial, numerical or functional.
- The flexibility an actor provides to others in the labour hierarchy, which may be financial, numerical or functional.
- The numerical and functional flexibility an actor enjoys over his or her own labour time.

The second issue in relation to flexibility is control over the labour process. Braverman (1974) has discussed in detail the manner in which the rise of industrial capitalism leads to growing control over the labour process by the capitalist. The introduction of Taylorism raises control to the level where the management dictates to the worker the precise manner in which work is to be performed. Braverman's assertion that subcontracting and piece rate payments are inefficient survivors in the development of capitalism is not true as one finds a large prevalence of subcontracting and homeworking persisting as efficient and cheap sources of production. The question this poses is whether flexible production processes imply greater control over the production process by the artisan. Allen and Wolkowitz (1987: 109-134) have listed various ways in which contractors control homeworkers. The contractors control the labour process by

controlling the work task, output, quality of work and through the organisation of consent. Thus, in subcontracted outwork also, there are various ways by which workers are managed and an indirect control of the workforce maintained.

The third issue of flexibility raised in the literature is the relationship of labour market and functional flexibility to feminisation. Standing sees the global pursuit of flexible low cost labour as resulting in a substitution of women for men and a feminisation of the labour force. Elson (1996: 38) has contested Standing's association of flexibilisation with the substitution of women for men. According to Elson the gender division of labour is not over ridden by flexibility, but structures the form that flexibility takes (ibid: 40). Banerjee (1996: 5) has rejected the necessary connection between globalisation, flexibilisation and feminisation on two grounds. First she argues that capitalists have sought to lower the costs and optimise the efficiency of labour even prior to globalisation: flexibility has been in existence in the form of subcontracting in India prior to globalisation. Second that flexibility is compatible with a masculinised labour force.

The chapter is organised in three main sections according to the sites and types of production. Each section addresses three analytical questions, which are:

- What are the different types of flexibility prevalent in different sites and kinds of jewellery production? What is the experience of flexibility for different actors - entrepreneurs, contractors, artisans, and employees - male and female?
- What are the issues of control and autonomy raised in the context of flexibility in my study?

- What is the relationship of flexibility to the gendering of production in the three sites?

My analysis shows that in different types and sites of handmade jewellery production the extent of financial and numerical flexibility *for* the actors is related to their position in the hierarchy of the production chain, with those higher up in the hierarchy having greater financial and numerical flexibility, as well as greater control over their work hours. While all male actors have the potential to climb up the hierarchy of production relations, women's construction as housewives and control over their (hetero) sexuality in the villages of Medinipur and in Delhi means there is little potential for women to occupy positions from which they can take advantage of flexibility. Thus the hierarchy of subcontracting, which accrues different levels of advantage and disadvantage from financial and numerical flexibility to different actors, is gendered and is in favour of men. The functional flexibility of actors to cater to changes in demand has little significance in the villages of Medinipur, as silver chain production is the only item of jewellery produced. In handmade jewellery production in Delhi and NEPZ there is movement of actors between different production processes, but not in the context of shifts in demand.

Financial and numerical flexibility for the companies in machinemade jewellery production are related to the policies of casualisation of labour. A few companies resort to overtime work to gain additional flexibility. There is a slight feminisation of financial and numerical flexibility. Of the six companies, three resort to policies of functional flexibility for some employees. However, again this is not to produce different products,

but to enable the functionally flexible employees to perform multiple tasks in periods of slump in demand and in the event of some employees being terminated.

6.2 CHAIN PRODUCTION IN THE VILLAGES OF MEDINIPUR

6.2.1 Types and Experiences of Flexibility

In the villages there are neither firms nor any formal organisation of production, but an informal production system, linked to the cities from where the silver chain production work is subcontracted. The wholesale and retail outlets in Calcutta, to which this village production is linked, are not covered in the study. Thus, the focus of the analysis here is not on flexibility for the Calcutta firms, but on the flexibility of the production outlets in the villages. There is complete labour market flexibility here with informal labour market conditions, no written contracts, and workers working on a piece rate or a daily wage basis. However, there is little functional flexibility in the pattern of production in any of the villages as silver chains are the major items of jewellery produced.

As outlined in Chapter 4, the different actors in chain production in the workshops - entrepreneurs, contractors, artisans/subcontractors, employees, child/young workers - are all male. There is a majority presence of women as homeworkers. A few women are engaged in soldering and finishing as unpaid family workers. In this section I take up the nature of flexibility available to each actor in the informal production chain and their experiences of flexibility. Different actors may be a source of financial, numerical and

functional flexibility to those who pay them and may derive some flexibility from those they pay. They may experience different levels of numerical and functional flexibility over their own labour. I detail the type of flexibility that each actor embodies. For some actors I have accounts from them detailing their own subjective experience of flexibility.

Entrepreneurs

My study does not directly cover the entrepreneurs, for none of the entrepreneurs reside in the village. However, it is possible to discern the nature of flexibility available to the entrepreneur from the production and labour systems in operation. Contracting out of work means that entrepreneurs have complete financial flexibility and do not have to incur any fixed wage costs[1]. It also implies complete numerical flexibility for the entrepreneur. The system of production operates on informal lines and there is no written contract between the entrepreneur and the contractor. The contractor pays for the silver he brings from the entrepreneur and then sells back the finished chains to him. There is little need for functional flexibility for the entrepreneur to cater to changes in the nature of demand, for silver chain is the only item of jewellery produced.

Contractors

Contractors are paid by the entrepreneurs per kilogram of silver processed. The payment to the contractors varies between Rs 300-500 per kilogram. The net income of the contractor varies between Rs 1000-1100 per month for two smaller contractors and Rs 2000-3000 per month for Nikhilesh, who is the most well established contractor in Panna village. According to Nikhilesh:

> My income from jewellery work can vary with the market, but I am able to hedge the fluctuations in my income by agricultural production from my land. However, it does mean that my saving level varies over different months. Sometimes I wish I were able to get a more steady income. That is why I think that my children should study and take up regular jobs.

The contractor in turn derives financial flexibility himself through subcontracting and the use of daily wage employees, young and child workers, as well as through the unpaid work of his wife and other family members. In all the situations the contractor does not incur any *fixed* wage costs.

By the very nature of the labour process, contractors are a source of numerical flexibility for the entrepreneurs. The contractor also has considerable numerical flexibility through his use of variable labour. There is no written contract between the contractor and the artisan/subcontractor for the work subcontracted or any written agreement between the contractor and the daily wage employees on the terms of employment. The days and hours of work of daily wage employees can be varied. Nikhilesh, when asked about the wage system and the daily schedules of the artisans working in his workshop, said:

> The work in my workshop can go from 8 am in the morning to 6-7 p.m. in the evening. Depending on the availability of work, artisans may work up to 9 p.m. in the evening. On an average it is 8 hours of work in a day. The advantage in this trade is the flexibility it gives to me in the hiring of labour as also in their hours of work.

The above statement of Nikhilesh highlights his awareness of the advantage of flexibility and his role in reproducing it. Of the three contractors interviewed, two were themselves involved in jewellery work, whereas one undertook only overall supervision of the artisans and guided them on the design of the jewellery.

There is little need for functional flexibility i.e. for workers to move across job boundaries with changes in the patterns of demand, since all the contractors cater to only silver chain production. However there is some functional flexibility within different processes of silver chain production. The contractors also have functional flexibility in terms of their own labour, to move between supervision, jewellery production and agricultural production.

The above analysis demonstrates the need to distinguish between flexibility *for* and flexibility *by* a particular person, as indicated by Dickens (1992: 38). It shows that contractors have both financial and numerical flexibility which they feel is advantageous for them. Some contractors get additional financial and numerical flexibility through the unpaid labour of their family. The financial and numerical flexibility *by* the contractor entails uncertain income *for* the contractor. Thus the entrepreneur derives maximum financial and numerical flexibility from the contractor, passing on the risk of uncertainty, and then the contractor has to absorb some of it but is able to pass much on down the hierarchy. Functional flexibility as flexibility in the production system has little applicability here.

Artisans/ Subcontractors

The payment from the contractors to the artisans/subcontractors is made on a piece rate basis and varies between Rs 3-4 per chain. The organisation of the production system through subcontracting means that artisans/subcontractors provide financial flexibility to the contractors. Financial flexibility for the contractors from the artisans/subcontractors,

means fluctuating income for the artisans/subcontractors whose income varies from between Rs 700-800 per month to Rs 1000-1500 per month. This is how Dhiraj, an artisan/subcontractor, described his experience of work:

> I do not like this work much, because of the fluctuating level of income, which can vary from Rs 800-1200 in a month. I also do not have any land to supplement my income. This work causes pain in my eyes. However, I have little other option, as this is the only work I know.

None of the artisans/subcontractors employ any paid labour. However they do derive some financial flexibility from the child/young workers, who are paid in kind or given nominal cash. In the villages the child/young workers are used according to demand so that in times of a slump in demand they are not called for work and their food expenditure is not incurred by the artisan/subcontractor. Of the five artisans/subcontractors interviewed, two were assisted by their wives in chain soldering and one by his sons. Though sons seem to closely substitute for the labour of unrelated child/young workers for the artisan/subcontractor, the outcomes of the two are very different. As an adult, a son might be brought into the business as an equal, or even take it over, but an unrelated child/young worker from a poor family can expect no such endowment.

Young and child workers and unpaid family workers are also numerically flexible in that their hours of work can be adjusted to suit the needs of the artisans/subcontractors. According to Suresh, an artisan/subcontractor, 'One of the advantages in my business is that I do not need to hire paid labour. My sons assist me and can vary their hours of work according to the requirements of the market.'

The hours they themselves devoted to chain work vary across the artisan/subcontractor respondents from seven to fourteen per day. Some artisans/subcontractors have the numerical flexibility to choose the amount of work they undertake, this numerical flexibility being derived through the unpaid labour of family members in some cases. This is how Suresh described his work schedule:

> I work for about seven hours in a day on chain soldering. I earn Rs 1000-1200 per month. There is little potential to earn more in the village. There is not enough work at times, and the payment is also low. I get paid at the rate of Rs 3-4 for a 20-inch chain. My son assists me in my work after school, in the evenings. I try to go once to my fields to supervise the labour working there.

The artisans/subcontractors are both a source of financial and numerical flexibility for the contractors, and also derive some financial and numerical flexibility from their use of child/young workers and unpaid family workers. They also have the numerical flexibility to choose their hours of work. The experience of being a source of financial flexibility to others means uncertainty of income for the artisans/subcontractors. However not using employees reduces the fluctuations in the net income of the artisans/subcontractors.

As mentioned, functional flexibility to cater to any diversification of production is not relevant here, but the artisans/subcontractors have the functional flexibility to move between functions involved in chain production like rounding wires, soldering and finishing chains.

Daily Wage Employees

The daily wage employees work in the contractor's workshops as casual labour and are paid a wage of Rs 40 for an eight-hour day. I do not have information on the direct

experiences of the employees but I can discern the nature of flexibility *by* and *for* the employees through my talks with the contractors.

The daily wage employees are a source of financial flexibility for the contractor, for they are paid according to the work available. Financial flexibility for the contractor means uncertain income for the employee. By their very nature the daily wage employees are also a source of numerical flexibility for the contractor, since their work can be varied on a day to day basis. However, the daily wage employees have no financial flexibility for themselves, though they do have some numerical flexibility and choice over their work. The daily wage employees are functionally more flexible than the artisans/subcontractors for they not only move between rounding wires, soldering and finishing of chains but also do finishing and polishing of chains.

Child/Young Workers

Almost all the adult artisans and employees in Medinipur, and a majority of artisans and employees in Delhi and NEPZ, had the experience of working in the contractor's or artisan/subcontractor's workshop in the village as a child/young worker. Some of them had worked part time along with attending the village school while others had worked full time after leaving school. I rely on their retrospective accounts for the experiences of male child/young labour, since access to those working in this category now was so difficult.

Child/young workers represent a flexible pool of very cheap labour. They enhance the financial flexibility of the contractors and artisans/subcontractors, as well as their numerical flexibility, since they are available to work overtime in case of peak demand. The child/young workers have no financial flexibility for themselves and little choice over their hours of work.

During their training period child/young workers learn thinning of wire, chain soldering, preliminary finishing and some also learn final finishing and polishing. The child/young workers provide some functional flexibility to the contractor in terms of moving between different processes. However, this functional flexibility is not related to diversification of production.

Women Homeworkers

The women workers are paid on a piece rate basis of fifty paisa (Rs 0.50) per chain. Women are a source of financially flexible labour for the contractors and artisans/subcontractors, as latter do not incur any fixed wage costs. This means fluctuations in the level of work available for women and their level of income. This is how Pranita described her experience of work:

> I work on an average for 7-8 hours on chain weaving. However there are a few months when there is little work available and other months when I have to work for as long as ten hours a day. I take up only that much work which I can cope with, along with my other responsibilities. On an average I earn between Rs 250-300 a month.

For most other women engaged in chain weaving it is not the availability of work but the fitting in of chain weaving with other work which is the major issue.

Contractors and artisans/subcontractors also have the numerical flexibility to allocate work to as many women as they deem necessary, due to the large pool of women's labour available. In cases of tight deadlines the work is spread out among a larger number of women.

Financial and numerical flexibility *for* women derived from other's labour has little relevance here. Functional flexibility here is in the broader sense of functional flexibility of women to shift between reproductive and productive work.

Women Unpaid Family Workers

All the women engaged in chain soldering are unpaid family workers, and their husbands are contractors or artisans/subcontractors. In these cases the women workers provide additional financial and numerical flexibility to their husbands. However, women as unpaid family workers derive no financial or numerical flexibility from other's labour. The hours of work devoted to chain soldering vary from two to three hours per day for Bimla and twelve hours per day for Alka. Chain work in all three cases has to be fitted in with all the domestic chores. This is how Bimla described her daily involvement in chain soldering: 'I clean the house, do the cooking, wash utensils, look after the children, and then make the chain. I work for six to seven hours on an average.'

Again, although women have the numerical flexibility to decide on the scheduling of chain work, having sole responsibility for domestic tasks allows them little flexibility over the day. Unlike chain weavers who earn a wage, the women engaged in chain

soldering work for their husbands and are unpaid. Their functional flexibility is in the context of production and reproduction work.

The above analysis shows that the informal structure of the labour market means that each person in the production chain is a source of financial and numerical flexibility for the person from whom he/she receives the payment. Thus the contractor is a source of financial and numerical flexibility for the entrepreneur, the artisan/subcontractor for the contractor, the child/young worker for the contractor or the artisan/subcontractor and the woman homeworker for the contractor or the artisan/subcontractor. The women engaged in soldering of chains are unpaid family workers and a source of financial and numerical flexibility for their husbands, who are either contractors or artisans/subcontractors.

The experience of financial flexibility for different actors differs according to their position in the hierarchy of production relations. Being a source of financial flexibility means having uncertain income, but if some financial flexibility can be derived this means a reduction in fixed wage costs, which in turn reduces the fluctuations in profit margins. Daily wage employees, child/young workers, women homeworkers and unpaid family workers are all a source of financial flexibility for others, but since they do not have any person working for them, are unable to derive any financial flexibility from others.

Numerical flexibility *by* and *for* a person is related to the question of who has a choice of working hours and whose interests this serves. Because of low pressure of demand for

labour in the village each person in the informal production chain does seem to have some choice over the hours of work he/she devotes to chain work. However, the *choice* of working hours is related to the financial position of the person. Thus, contractors and the better off artisans/subcontractors with land can divide their time between jewellery work and agriculture. However for lower-income contractors and artisans/subcontractors with little fall back, even twelve hours of work does not guarantee comfortable living. Low pressure of work for many artisans/subcontractors and employees is a symptom of underemployment and not a real choice. For women chain weavers and those engaged in chain soldering numerical flexibility of work in chain weaving is accompanied by inflexible work schedules with household work and childcare leaving little time for leisure. For child/young workers the numerical flexibility and choice is also limited.

Functional flexibility, as movement between different types of jewellery production to cater to different demands of the market, has little applicability here for silver chains are the only item of production. However there is some functional flexibility between different processes of production of silver chains for the male artisan/subcontractos, employees and child/young workers. There is little mobility across gendered job boundaries for men and none of the men is engaged in chain weaving. For women engaged in chain weaving there is little functional flexibility. Of the three women engaged in soldering and finishing, one had worked in chain weaving. However after starting on soldering work with her husband she gave up chain weaving. For women functional flexibility means moving between reproductive and productive tasks.

6.2.2 Control and Autonomy

In considering the concepts of control and autonomy in the context of the village chain-making economy it is important to raise the questions put forth by Huws et al (1989: 12), namely whether workers are free to choose to work and whether they are free to allocate their time between work and leisure. Freedom to choose to work is not available to any person in the village, for although many contractors and artisans/subcontractors did have land and agricultural production, in no case is the income from land sufficient for the family. The 'choice ' of the nature of work is limited because of little development of industry, low family resources and associated low education levels. Some male children, youth and adults do have the choice of migrating to Delhi or Calcutta to get absorbed into jewellery production there, but women are constrained in their spatial movement even within their village. The discourse of seclusion and control over their (hetero) sexuality restricts women's opportunities of work in chain production to working from the confines of their home as chain weavers or working as unpaid helpers to their husbands in chain soldering and finishing. The few who do migrate to the cities do so as dependants of their husbands.

As to the freedom to allocate time between work and leisure, except for the better off contractors like Nikhilesh, most have little choice over their hours of work or leisure. However, the contractors have the flexibility to organise the day between jewellery production, supervision and agricultural work. This is how Samesh, a contractor, described his work schedule:

> I start working in my workshop at 9 a.m. I guide the artisans and also do the work myself. Then I get up at 1 p.m. to have lunch. I go back to the workshop at 3 p.m. and would work up to 5 p.m. There are days when I work up to 8 p.m. However, in the sowing season and during the harvest, the workers do the work and I only supervise them intermittently.

Some artisans/subcontractors who work in chain making allocate a few days a week for chain work and the rest for sowing and harvesting in the fields. Prakash, one of the small artisans/subcontractors said that he allocates twenty days in a month for chain work and for the remaining ten days he looks after the fields. However, this control over their working day is accompanied by underemployment and poverty for many. Low wages and underemployment mean that artisans migrate to cities like Delhi, to get absorbed in gold jewellery production.

In the village the close kinship networks - fictive and real - mean greater control over the labour force by the contractor/subcontractor. This is especially the case with the child/young workers who work for food and whose apprenticeship period is prolonged. The extent of constraint or autonomy which a child/young worker experiences also varies according to any implicit understanding that he will be absorbed into the workshop in which he is getting training. According to Nikhilesh:

> The trainees work for as long as the adult artisans i.e. between 8 a.m. to 6-7 p.m. with tea and lunch breaks. However, as in the case of the adult artisans, sometimes they may work up to 9 p.m. There have been days when I had let some adult artisans go home but retained all the trainees up to even 10 p.m., to cater to an emergency order. The trainees are young and easier to control and also they have the incentive of getting work on payment in my workshop.

The above statement of Nikhilesh reinstates the prolonged training of child/young workers, for it indicates that they can meet an emergency order independently. In these cases the child/young workers have little flexibility to 'choose' their hours of work.

However there are some adult artisans who said that they had worked as children after school hours in a workshop and did have some choice in their hours of work. In some cases they were paid a pocket allowance of Rs 40-50 a month. This is how Sudhir, an artisan in NEPZ, expressed his experience as a child worker:

> I worked in a village workshop after my school. Some days I was working for 3-4 hours and other days for 6-7 hours. It depended on the availability of work and also on my mood. The contractor paid me Rs 40 as pocket allowance. I wanted to migrate to Delhi after learning some work.

The extent of flexibility which a child/young worker has to decide his own hours of work is related to the expectations of the worker as to whether he would like to get paid work in the contractor's workshop in the future. If he does, he is implicitly obliged to work hours that suit the contractor. If this is the case his autonomy is severely constrained.

The hours of work for women varied across the respondents. This is the way Urmila described her daily schedule:

> I get up at 6 a.m. in the morning. I have to clean the house, cook, look after the children, send them to school and take the cow for grazing. I then pick vegetables from my father-in-law's land. I do chain weaving after meals for 2-4 hours between 2 p.m. to 6 p.m.

Another respondent, Parvati, described her involvement in chain weaving as follows:

> I get little time for chain weaving. I have so much work, two children, and household work. I just earn Rs 2-3 in a day. I get paid at the rate of 50 paisa for an 18-inch chain. I work for about 3 hours in a day.

Thus women did have some control over their hours of chain work, although their household income and access to it doubtless circumscribe this 'choice'. Moreover, this flexibility to decide their hours of work in chain weaving is not accompanied by leisure but an inflexible day of domestic chores.

Flexible work as serving the interests of women in the short run (Elson, 1996) does not apply here. In terms of Allen and Wolkowitz's (1987) mechanisms of controls over homeworkers through work task, output and quality of work, none of the women, or even the men engaged in chain work, have any control over the work task or any discretion to design the chains. As regards the control over quality of chains, though none of the chain weavers said that their work is rejected, all of them did emphasise that they are very cautious in doing the work, and are thus engaged in self-surveillance. Most women here do not face strict control over the timing of output or the pressure to accept work. The constrained control which women have over their work has to be understood in the context of the overall social control over women's sexuality and mobility, which is tied to their confinement in their homes as chain weavers. If they do cross the gender division of labour and engage in soldering their work is constructed as 'help' to their husband. The concepts of 'choice' and 'control' of work by the artisan have little applicability in a set up where people live below the poverty line.

6.2.3 Flexibility and Gendering

In the village informal conditions in the labour market prevail. As discussed in the earlier sections, male contractors, artisans/subcontractors, daily wage employees, child/young workers and female home workers represent a financially flexible workforce for those 'higher' in the production chain. Women as unpaid family workers engaged in soldering and finishing are a source of additional financial flexibility for their husbands. Thus the

entrepreneurs, contractors and artisans/subcontractors - who are all men - are able to pass on some of their insecurity of income down the hierarchy of the production chain. The only actors who cannot pass on their financial insecurity through the use of other's labour are the daily waged employees, child/young workers, and women homeworkers and unpaid family workers. However, child/young workers and daily wage employees have the potential to become artisans/subcontractors. It is only women who cannot move out of the bottom position where the 'flexibility' and insecurity cannot be passed on to anyone else, which both keeps them as the most exploited labour in the production system and makes them dependent on male family members in the reproductive system. Thus gender, age and class hierarchies structure the form of flexibility, but it is the gender hierarchy which is the most rigid. The prevalence of flexible conditions of work occurs along with a gender division of labour. Elson's (1996: 40) contention that the gender division of labour, which confines women to relatively subordinate and inferior positions in the organisation of monetised production, is not overridden by flexibility, is true in the case of the village. As noted in Chapter 5, chain weaving is one of the lowest paid of all the jobs and women chain weavers have little mobility in the hierarchy of jobs or across the regions.

Elson's (ibid.) assertion that the gender division of labour structures the form of flexibility can also be interpreted in the context of the nature of numerical flexibility *by* and *for* a person. Men as contractors, artisans/subcontractors and employees, as well as women as chain weavers, are all a source of numerical flexibility and also have some numerical flexibility to decide on their involvement in chain work. However, the

numerical flexibility for the woman cannot compare with that for a well off contractor or artisan/subcontractor who can have time for leisure. Even artisans/subcontractors or fixed wage employees are underemployed and have 'forced leisure' in certain times, but women's work never seems to end. This can be discerned from the following statements by an artisan/subcontractor Dhiraj 'There are certain days when I have little work on chains. These days I go to meet my relations or just sit idle.' However, when women did not have chain work, the household work took most of their time. Thus according to Urmila: ' I do not weave the chain every day. In those days I do tasks like thorough cleaning of the house or sometimes make pickles. I do not remember sitting idle any time after marriage.'

When women cross the boundaries of the gender division of labour it is to add to the financial and numerical flexibility of their husbands, who are contractors or subcontractors. To that extent wives substitute for male artisans, and enter male jobs, to serve the needs of a completely flexible labour force for their husbands - a labour force which is unpaid, is numerically flexible, and does not need any written or unwritten contract to work. So in this limited sense Standing's (1989) assertion is also true, and the needs of flexibility lead to women substituting for men. However, this takes place in the familial sphere, outside monetised production relations and in many cases is perceived as a temporary phase until the husband accumulates enough.

6.3 HANDMADE JEWELLERY PRODUCTION IN NEPZ AND DELHI

6.3.1 Types and Experiences of Flexibility

The labour market in the handmade jewellery sector in Delhi and NEPZ works on informal lines with no written contracts on the hours of work, the nature of the job or terms of employment. The labour process here comes close to the system in the early phases of industrial capitalism in the West described by Braverman (1974: 60-61), with subcontracting, piece rate payment and prevalence of child labour in various industries such as mine work, carpet manufacturing and lace mills prevailing until the end of the nineteenth century. I will examine here in turn the nature and experience of flexibility on the part of the entrepreneurs, contractors, artisans, employees, child/young workers and unpaid women family workers.

Entrepreneurs

The entrepreneurs in handmade jewellery production in Delhi and NEPZ operate through contracting out the production of jewellery to a contractor or contractors. The entrepreneur loans the gold to the contractor on the basis of some security and pays on the basis of per gram of gold processed. I interviewed thirteen entrepreneurs in the course of my research. However, I have little information on the subjective experience of the entrepreneurs as none of them told me of the system of subcontracting prevalent in the zone and in Delhi in the first meeting. Indeed they indicated the prevalence of regular employment recorded as such in the official records. Although a few of them did admit that a contracting out system is prevalent in handmade jewellery production in the follow

up meetings, they did not elaborate on it. It is through my repeated visits to the workshop in Delhi and NEPZ that I learnt the details of the labour system in handmade production.

The contracting out of gold production means that the entrepreneur does not have to incur any *fixed* wage costs. The variability of the labour cost implies complete financial flexibility for the entrepreneur, but an uncertainty of income for the contractor. The prevalence of contractorship relieves the entrepreneurs from the responsibilities of supervision to a large extent. One of the entrepreneurs, Bharat, when asked to comment on the labour process in handmade jewellery production said 'We do not define our relationship with the artisans.' Subcontracting of production means that the contractor closely monitored recruitment, promotion and supervision of the artisans and the involvement of entrepreneurs in labour management is very indirect. The labour force in the workshops is numerically flexible in their hours of work and also in terms of their dispensability.

Besides the financial flexibility and freedom from supervision of the artisans, the system of contracting also gives the entrepreneurs the freedom to get different types of jewellery - plain, enamelled or stone studded - processed in any workshop in Delhi, according to the specialisation of the artisans working in the workshop. However, this freedom is limited in the case of NEPZ, because of restrictions on getting gold processed from outside the zone and thus the necessity of getting it processed by the artisans working in the zone. In this case the individual artisans did not have to be functionally flexible to

take care of the fluctuations in demand, for the entrepreneurs had a wide pool of artisans specialising in different kinds of jewellery production to tap into.

Contractors

The financial flexibility to the entrepreneur means large variations in the income for the contractors. One of them, Tapas, when asked about his monthly income, replied: 'Income depends on the availability of work. It can vary between Rs 2000 per head to Rs 20,000 combined.' The contractors also derive considerable financial flexibility because of the prevalence of subcontracting. The financial flexibility *by* the contractor for the entrepreneur means uncertain income *for* the contractor and financial flexibility *for* the contractor reduces the fluctuation in the contractor's income.

For the fixed wage employees the liability of the contractor to pay the fixed wage is limited in most cases to two or three months, in periods of a slump, after which the worker is terminated. The variability of the contractor's income is greater the larger the number of workers on a fixed wage basis, for this means a fixed deduction from the contractor's gross margin, variable according to the amount of gold processed. On the other hand, the variability of income for the contractor is less if the workers are paid on a per gram basis since then the deduction is proportionate to output.

The contractor has numerical flexibility to vary the hours of work of the artisans, the employees and the child/young worker according to the pressure of demand. The co-residence of the artisans, employees and young and child workers in the workshop, with

no written contract on the number of hours, means that they can be made to work for as long as eighteen hours a day. According to Sudesh: 'There are times when I have to meet a production target very closely. In which case all the artisans may have to work for as long as eighteen hours.' The contractors also have flexibility on the extent of their own involvement in jewellery manufacture. The numerical flexibility available to the contractor gives some contractors the time to pursue their status as patrons in their community.

There is little need for functional flexibility for the contractors by way of reorganisation of production boundaries to accommodate changes in the nature of demand for jewellery. Most artisans specialise in one or a few processes of jewellery production. Thus the contractor can take care of changes in the patterns of demand by tapping the specialised skills of different artisans - in plain jewellery production, chain production and in enamel work, working in his workshop or sometimes outside his workshop in Delhi - without the need for individual artisans to be functionally flexible.

Artisans

Artisans are a source of financial flexibility for the contractor. The payment to the artisans varies from Rs 6-14 per gram of gold processed and the income of the artisans varies from Rs 1800-2200 to Rs 4000-5000 per month. Being a source of financial flexibility for the contractor means uncertainty of income for the artisan. This is how Prashant, an artisan, described his experience of working:

> I do not like this work, but I have to do it. I do not also like the food we get here. I work on a per gram basis at the rate of Rs 9 per gram. There has been very little

> work for the last one year so that I have been earning only Rs 1500 per month. Otherwise in normal times I earn around Rs 2500 per month.

Most of the artisans are assisted in their work by at least one child/young worker. The artisans bear the food and subsistence expenditure of the child/young workers. Financial flexibility for the artisans here is derived from the use of child/young workers, who are paid only in subsistence. In prolonged periods of slump when the artisan is without work, he does not incur any expenditure for child/young workers. However, often the artisans incur food expenditure for the child/young workers in short periods of slump, when their own income would have stopped.

Artisans are also a source of numerical flexibility for the contractor. The prevalence of subcontracting implies that the hours of work for the artisans can vary from negligible in times of slump to as long as eighteen at peak demand. Co-residence of artisans in the workshop, coupled with poverty and fictive kinship ties with the contractor, mean that they are made to work according to the fluctuations in demand and the requirements of the contractors and entrepreneurs. This numerical flexibility *by* the artisan mean little numerical flexibility *for* the artisan, who has little 'choice' over the hours of work. Poverty leads the artisans to work for maximum hours, according to the availability of work, amounting to ninety-one hours per week on average. However, the flexibility of working hours for the artisans is greater than those for employees. Thus, according to Salil, an artisan:

> I prefer it this way as it gives me the freedom to work the way I would like to. However, for 3-4 months in a year there is no work available. That time I pay for the food out of what I have earned in the past.

As explained earlier, there is little need for artisans to cross job boundaries to cater to changes in demand. However, there is a limited 'functional flexibility' across job boundaries as some artisans do move between different processes, from setting to soldering in handmade jewellery making for example. On the other hand there is specialisation in processes like polishing and cutting.

Employees

The wage level of the employees varies between Rs 1000 and Rs 3000 per month. This is over and above the food expenditure of about Rs 500, which is deducted by the contractor at source. Employees in most cases have to meet a minimum output target of between 300 and 600 grams of gold ornaments in a month. In some workshops, like that of Tapas, all workers are paid a fixed wage, whereas in Sudesh's workshop there is a mixture of employees and artisans.

On talking to employees and artisans, it became clear that after finishing their apprenticeship period most work on a fixed wage basis, and later some may opt for working on a per gram basis. In any such negotiation with the contractor, though the contractor has greater bargaining power, the option for the employee to move to another workshop makes the negotiation more equal. This is how Suman, an employee, described it: 'I am working on a fixed wage basis now. But I will negotiate for shifting to a per gram basis or might shift to another workshop.' However, there are certain other employees who prefer to continue on a fixed wage. According to Tanvir: 'I prefer to work

on a fixed wage, because it gives me an assured income which is also available during a temporary slump.'

In case of a slump in demand the employees have to work whereas the artisans do not have any work. Employees continue to be paid for a maximum of 2-3 months in the absence of work. However the employees are also a source of financial flexibility for the contractor, for though they are paid a fixed wage they have no formal contract regarding their employment conditions, hours of work or terms of employment and can be terminated if the slump in demand is prolonged. While they provide some financial flexibility they do not derive any from elsewhere. The employees can exercises agency by moving from workshop to workshop, as the artisans do. For example, Tarun, who had returned to the village after working in Delhi for many years, said: 'I had gone to earn money and used to shift from one workshop to the other, wherever I was paid more. I was not bound with anyone nor bought by anyone and was free to shift from one place to the other.'

The employees have even less choice than the artisans in deciding their work schedules. As in the case of artisans the need for functional flexibility of the employees is limited.

Child/Young Workers

I have detailed in Chapter 4 the process of induction and training of child/young workers in handmade jewellery production in NEPZ and Delhi. The child/young workers are inducted from Medinipur village as trainees into the workshops of hand made jewellery

production in Delhi and NEPZ, through real and fictive kinship ties with the subcontractor, contractor and adult male artisans. The trainees are tied to their mentor for the period of training, which can go up to two years. During the course of training and for about half the period after training the child/young workers are not paid any cash. According to one of the adult artisans, 'The trainees have to work free for the mentor for at least half the period of their training. This is to cover the losses, which the mentor has borne because of the mistakes committed by the trainees in the course of training.' The subsistence expenditure of the child/young workers is invariant with the market demand and at the same time it is so small in comparison to the work done that there are few cases of child/young workers being terminated with a slump in demand. In a narrow sense child/young workers are not a source of financial flexibility for the artisan or contractor who pay for their subsistence. However, in a broad sense they are a source of large financial flexibility and labour surplus for the contractors and the artisans.

Here the child/young workers provide a cheap and highly functionally flexible source of labour for the adult artisans and contractors, and move between work in production and reproduction. The child/young workers are a source of numerical flexibility as their hours of work in jewellery production are decided by their mentors. In some cases the mentor prolongs the trainee status of the child/young workers by allowing them little time to work on jewellery production. This is how one of the adult artisan, Trilok, described his work 'I was made to run errands for my mentor. I used to cook, wash, and shop for him. He allowed me little time to learn jewellery work so that I remained unpaid for four

years.' The trainees have little choice or flexibility to shift from one workshop to the other during the course of their training.

Women Unpaid Family Workers in Delhi

The few women working in handmade jewellery production are 'hidden' unpaid family workers. Of the four women unpaid family workers, three knew chain weaving and one knew jewellery set making. Being a source of unpaid labour, women represent labour which need not be paid in slump or boom, and whose hours of work and extent of involvement in jewellery work can be varied with the requirements of the market and the position of their husbands. Thus women here are the most flexible members of the labour force, who do not need to be appointed or terminated but can be used as and when required, without payment, by their husbands.

Women do jewellery work for 'flexible' hours, fitting in their daily domestic work schedules with chain weaving. However this flexibility of work in chain weaving is accompanied by an inflexible work schedule for women, since they have to take care of all the domestic responsibilities and have little time for leisure. As regards functional flexibility by women within jewellery production, some did move between jewellery making and supervision of the artisans. However, their functional flexibility is more in the context of moving between production and reproduction work.

The above analysis of the nature of flexibility available to different actors in handmade jewellery production in Delhi and NEPZ shows that, just as in the case of the village, the

extent of financial and numerical flexibility available to different actors depends on their position in the hierarchy of the labour process. It also shows that every person is a source of financial and numerical flexibility for the person from whom she/he receives the payment. As in the case of the villages of Medinipur, here also the entrepreneurs, contractors and the artisans are able to pass on some of the disadvantage of their flexibility down the hierarchy of production. It is the employees, the young and child workers and the women unpaid family workers who provide financial flexibility but derive none. In the case of unavailability of work in a particular workshop or in search of higher earnings employees may shift from one workshop to another, and may even bargain to become artisans. For young and child workers, the phase of immobility and little control over their labour power is a temporary one in their lifecycle. However, the construction of women as housewives, the social control over their (hetero) sexuality and the restriction on their mobility means that the few women who are represented in handmade jewellery production in Delhi have little or no prospect of moving up in the production hierarchy or even being recognised as independent workers. They continue to be a source of financially flexible labour for their husbands, moving between the boundaries of production and reproduction work, according to familial requirements.

6.3.2 Control and Autonomy

As to the 'choice' in deciding to enter jewellery production, most artisans have little real choice. Poverty coupled with few employment avenues means that most males enter jewellery production as children in Medinipur, some of whom later migrate to Delhi. This

is how one of the employees, Drupad, working in Delhi, described his perception of work:

> I do not like this work. I have to work for long hours which is an average of 8-12. Sometimes I have to work for the whole night. Sometimes I feel the strain in my eyes. Moreover the nature of the work is precarious and uncertain. After doing Higher Secondary [equivalent to 'A' level in UK], I do not feel like doing this work. Most of the people here are uneducated or have done only primary school. I feel myopic and also unwell. Every month I have to see the doctor. I feel my life will be shortened, if I continue to work in this line.

Though not all the artisans perceive jewellery work so negatively, most did complain of long hours, uncertainty and low payment for the work. However, the artisans exercise their agency in moving from one workshop to the other within Delhi or to NEPZ, with fluctuations in demand and for a better deal.

The autonomy and 'choice' of hours of work varies inversely with the economic position and power of the actors. The system of subcontracting implies that the contractors have the maximum autonomy and choice in their time use. Some contractors like Tapas combine their duties as contractors with the making of jewellery. According to Tapas 'I have to get the orders from the entrepreneur, get gold from him, arrange for the raw materials, supervise artisans in designing and in their work pace. I also make jewellery for 6-7 hours in a day.' There are other prosperous contractors who have little active involvement in jewellery manufacture and have greater flexibility in hours of work. This is how Sudesh, a prosperous contractor with a workshop in Delhi and also involved in contracting business in NEPZ, described his daily schedule:

> I get up in the morning, get my children ready, and then attend to my workshop, after which I go to the market or NEPZ. I also do some social work. There are many thousands of people from my community in this area. They have many

> problems like a problem with a jeweller, or with the landlord - I help them with their problems. Sometimes, if artisans find it difficult then I also make the jewellery.

The statement of Sudesh shows that as a contractor he has considerable control in deciding his daily schedule, which allows him the time to pursue his status as a patron in his community, which is useful for class mobility.

Artisans have little autonomy but more than that of the employees. While artisans largely engage in self-surveillance of their work time, the contractor records the output produced by employees. This is how Suman, an employee who was getting a fixed wage of Rs 1800 per month, described his work 'There are days when there is an urgency of demand and I have to work the whole night, whereas there are other days when there is no work and I can roam around.' Thus, an employee has little 'choice' or control in the timing of the work. The employees and artisans have little flexibility to use their innovative skills to produce the jewellery. The designs for jewellery are provided by the entrepreneur and are closely monitored by the contractor.

Child/young workers have no autonomy over time use. The complete numerical and functional flexibility of child/young workers for the mentor means that the mentor decides the allocation of the young worker's time between jewellery work and other work. As one child worker, Debu, describes:

> There are some days when I assist my mentor from 8 a.m. to 12 p.m. or even longer, getting up in between to do some cooking. However there are other days when I am washing, cooking and shopping and get little time for jewellery work. Shobhash *Bhaisahab* [a term used to address someone respectfully as elder

> brother], who lived in my neighbourhood and brought me here, decides my schedule.

Unpaid women family workers, do have some autonomy to decide when to fit in their chain work, but the sole responsibility for housework means little leisure time for women. This is how Shobha described her daily schedule:

> I get up at 6 a.m. in the morning, cook breakfast, get my children ready, pack their lunch boxes and send them to school. Then I take my bath, clean the house and do the washing. I sit down to weave the chain for 2-3 hours at about 10-11 a.m. I get up at 1 p.m. to cook lunch. My children come back at 2 p.m. from school. I give them lunch and then again sit for 2-3 hours in the afternoon for chain work. In the evening I make dinner and if there is some time at night I do some chain work up to 11 p.m. Some days when there is emergency work I even weave the chain up to1 p.m.

The involvement of women in chain weaving also varies with the family income and the age of their children. Of the four women workers in handmade jewellery production, two have left jewellery work. Sona left the work with the improvement in the financial position of her husband and Punita after having children. However, in the absence of their husbands they continue to be involved in the supervision of employees and artisans. The other two women, Suneet and Shobha, continue to be involved in jewellery work. Thus, women's involvement as unpaid family workers varies over the life cycle and with the financial position of the husband.

In short wives here serve as a reserve army of labour for their husband: a labour pool which can be tapped without payment, is flexible and whose work is undermined as 'help' and not 'real work'. However, they do have some 'control' over the labour process, as their pace of work is not closely monitored. While two women, Sona and Shobha, said that

they use little innovative skills in chain weaving, Punita and Suneet said that they have been involved in some designing of the jewellery and supervising the artisans on the same. Thus in terms of the mechanisms of controls over homeworkers outlined by Allen and Wolkowitz (1987), unlike the homeworkers in their study, the women family workers here did have some discretion over the work task and quality of work.

The other method of 'control' over all the artisans and employees, used by the contractor, is through real and fictive kinship ties. Most artisans and employees belong to the 'Myso' caste - this is a sub caste of Vaishya (artisan and merchant castes). Kinship ties can mean one's brother, brother in-law or cousin. Fictive kinship can mean people residing in the neighbourhood or in the same village and known to the contractor or artisan. The artisans/employees address the contractor as *Bhaisahib,* meaning elder brother. Most of the artisans/employees are recruited as child apprentices in the workshops, through the kinship networks in the village. Age and kinship ties give authority to the mentor for whom the child/young workers work. Kinship becomes especially important in an informal market system where the trust of the contractor in the artisans is important because of the high value of gold. The importance of kinship networks in the induction of the artisans is described by Tapas in the following words:

> There is a preponderance of artisans from Medinipur district in handmade jewellery production in Delhi because one person, who comes here, will bring his kith and kin to the place. Trust is very important in this trade. That is why people prefer to get their kith and kin. I give so much gold to the artisans to work with. If I keep a stranger, he might run away with the gold. and I would not even know how to trace him. When I keep a known person, not only do I trust him, but also in case of mishap can trace him. I get one of my relations, later he will get his relation and so on. 70% of the people are from Medinipur.

From the above statement of Tapas it is clear that though trust is important, kinship ties, real and fictive, give additional power to the contractor over the artisans/employees and to artisans/employees over the child/young workers. This power works through information, knowledge and possible surveillance. On the other hand, the trust of the workers in the contractor is also important for payment of the wages. I found that because of the informal nature of the labour market, with no written contract of work, the wages are not paid regularly to the workers, nor are the workers desirous of such a payment. The contractor first deducts the food expenditure of the artisan, as the food is provided in the workshop/factory. Thereafter, in many cases the artisans just take the minimal monthly amount required for their subsistence and let their savings accumulate with the contractor. They then take this as a lump sum amount at the time of their visits to the village or when they send money to their village. This is in effect like an interest free loan or a subsidy to the contractor.

In an informal set up without a formal contract, and with irregular payments, the chances of the workers being cheated by the contractor are great. In many cases the workers complain that they are duped and not paid their dues by the contractors, which leads them to change workshops or even to go back to the village. Thus, kinship ties lead to a building up of false trust by the workers in the contractor. Little legal intervention is possible in such an informal set up for the workers to get back their due. On the other hand, however, the superior position of the contractors and their domination in the village reduces their risk of a breach of trust by workers.

When speaking to Tapas and some other contractors, I realised that because of the poverty in West Bengal, the contractors do not consider the labour process and the prevalence of child labour as exploitative. Rather many of them believe that they induct children for the benefit of their kith and kin and gain little themselves in the process. According to Tapas:

> I am also teaching so many children, whom I bring from the village. I incur their food, clothing and medical expenditure during the apprenticeship period. Everything I give, and after learning they work for me for about six months after which I have to pay them. But I think that I have to do this much for my village people.

Not only do kinship ties entail additional power for the contractor in the workshop they also entail status and power in his village of origin. Tapas described his experience of inducting artisans from his village in his workshop:

> Whenever I go to visit my family in the village, there is always the pressure to bring some more trainees. I also think I should give them the opportunity to earn better. This gives me satisfaction that I am helping my people and I also get better respected for it.

Thus migration offers the potential for social and occupational mobility to men, which is not available to women.

6.3.3 Flexibility and Gendering

As noted, the handmade jewellery sector in Delhi has been in existence from as early as 1880, a century before the liberalisation in India in the 1980s, and has been extended to the NEPZ in the 1980s. This sector is characterised by a masculinised labour force, working in flexible conditions. Thus Banerjee's (1996) rejection of the necessary

connection between globalisation, flexibilisation and feminisation appears to be substantiated.

I have noted in Chapter 5 that the practices of organising handmade jewellery production in a communal space and of excluding women from that space are tied to the discourses on the need to protect women's (hetero) sexuality. The exclusion of women is linked to the communal living and working of the male artisans, which allows the contractor to maximise his numerical flexibility through use of the labour of the artisans at any hour of the day or night. Flexibility of the labour force is tied to paternalism, which allows the contractor to legitimate the practice of no fixed hours or contract, irregular wage payments, and communal living. In this case numerical and financial flexibility is accompanied by the exclusion of women from the visible spaces of the workshops and factories.

As in the case of the village, in Delhi and NEPZ there is a hierarchy of subcontracting at different levels where persons higher up in the hierarchy are able to pass on some of the disadvantage of the flexibility they constitute to persons lower down the hierarchy. There is gatekeeping by age, class and gender of positions of power, with male employees, youth and children lowest in the hierarchy and women outside it. The male employees, youth and children have the potential of climbing the ladder of subcontracting to become artisans and contractors and derive advantages from flexibility. But women are outside the visible workforce.

A few women who are incorporated as hidden unpaid family workers further enhance the numerical flexibility of their husbands, who are contractors in all the four cases. Their work allows their husbands to take care of any sudden rise in demand. The women's unpaid labour is also an additional source of financial flexibility for the contractors, which is crucial in the initial years of establishing their contracting business. From the above analysis of the gendered labour process in handmade jewellery production, one can clearly agree with Elson's (1996) claim that the gender division of labour determines the form of flexibility. In this case the broad gender division of labour, with women at home and men in paid work, helps to organise a masculinised communal living and work space in the workshops and factories, which gives maximum flexibility in terms of hours worked to the contractor.

6.4 MACHINEMADE JEWELLERY PRODUCTION IN NEPZ

In contrast to handmade jewellery production, machinemade jewellery production in NEPZ is organised on formal lines. Workers work in a factory for a fixed eight and a half hours per day on average, with a lunch break of half an hour. The workers are recruited both informally through personal contacts and also formally through advertisements and interviews. The workers work full time with little flexibility in hours of work or the prevalence of any shift system. Sometimes workers are required to work overtime, which does give some numerical flexibility to the entrepreneurs. There is no subcontracting or homeworking in machinemade jewellery production. Thus the financial flexibility for the firm is mainly in the context of casualisation of the labour force. There is some evidence

of functional flexibility of the work force, but it is not related to changes in the nature of the product demanded. Among the companies engaged in handmade and machinemade jewellery production there is no movement of artisans from one sector to the other with changes in demand.

This section is divided into three sub sections. First I take up a discussion of different measures of flexibility adopted by different companies in machinemade jewellery production and the gendered nature of the same. I also consider the experiences of flexibility for the entrepreneurs and production workers, where available. The second subsection discusses the issues of control and autonomy of workers and the third analyses the relationship between flexibility and the gendering of the labour force in the context of the debates in the literature.

6.4.1 Types and Experience of Flexibility

Table 6.1 shows the employment profile of the production workers in the six companies involved in machinemade jewellery production in NEPZ, categorised on the basis of their contractual status as permanent, temporary and casual. To discern the extent of financial flexibility available to each firm and the gendered nature of the same, I define the workers with temporary and casual contracts as flexible labour, in my initial analysis. Other methods firms resort to gain financial flexibility will be taken up in the discussion under each firm category. The financial flexibility of the firm derived from the dispensability of the workers also means a greater numerical flexibility.

Table 6.1: Distribution of Permanent, Temporary and Casual Production Workers in Companies Producing Machinemade Jewellery

Name of the Company	Permanent Production Workers		Temporary and Casual Production Workers		Permanent Production Workers as a Percentage of All Male or Female Workers		Temporary and Casual Production Workers as a Percentage of all Male or Female Workers		Permanent Male or Female Production Worker as a Percentage of all Permanent Production Workers		Temporary and Casual Male or Female Production Workers as a Percentage of All Temporary and Casual Production Workers		Male or Female Production Workers as a Percentage of All Male and Female Production Workers	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Raghav Jewellers Ltd	0	0	30	5	0%	0%	100 %	100 %	0%	0%	85.7 %	14.3%	85.7%	14.3%
Dimple Jewellers Ltd	40	0	25	15	61.5 %	0%	38.5 %	100 %	10 %	0%	62.5 %	37.5%	81.25 %	18.75 %
Pratap Diamond Jewellers Ltd.	87	34	15	19	85.3 %	64.2 %	14.7 +%	35.8 %	72 %	28%	44.1 %	55.9%	65.8%	34.2%
Victor Jewellers Ltd	50	20	10	5	83.3 %	80%	16.6 %	20%	71. 4%	28.6 %	66.7 %	33.3%	70.6%	29.4%
Chandra Jewellers Ltd.	62	10	16	0	79.5 %	100 %	19.5 %	0%	10 0%	0%	86.1 %	13.9%	79.6%	11.4%
Bharat Ratna Jewellers Ltd	90	34	0	0	100 %	100 %	0%	0%	72. 6%	27.4 %	0%	0%	72.6%	27.4%
Total	329	98	96	44	77%	22.9 %	22.6 %	31.0 %	77 %	23%	68.6 %	31.4%	75%	25%

Source: Based on the materials collected in the course of the fieldwork

Note: The figures relate to June 1996

M: Male F: Female

The companies have been arranged in descending order of financial flexibility, starting with a firm with all flexible labour, moving to four mixed firms with flexible and

permanent labour and ending with a firm with no flexible labour. The mixed firms are arranged in descending order of the extent of feminised flexibility.

As can be seen from Table 6.1, the employment of women in the six companies engaged in machinemade jewellery production under study varies between 11.4% to 34.2%. The overall representation of women in machinemade jewellery production is 25%. As described and analysed in the previous chapters, the women are concentrated in the wax, quality control and packaging departments whereas men are in the master making, casting, polishing, and stone studding departments.

Table 6.1 shows that 31% of all female workers and 22.6% of all male workers are temporary and casual workers, indicating that a greater proportion of the female than the male workforce is engaged in flexible forms of employment. As regards the overall representation of men and women in permanent, casual or temporary work, men are 77% of permanent workers and 68.6% of temporary or casual workers compared with their overall representation in the workforce at 75%. Women make up 23% of permanent and 31.4 % of temporary or casual workers. Thus women are under represented among permanent workers, but are over represented in temporary and casual work, compared with their proportion in the total production work force at 25%.

There are wide variations in the percentage of flexible workers out of the total workforce in the sample companies, ranging from nil in the case of Bharat Ratna Jewellers to 100 percent in the case of Raghav Jewellers. In Dimple Jewellers, Victor Jewellers and Pratap

Diamond Jewellers the percentage of female casual workers is higher than the percentage of male casual workers.

Chandra Jewellers is the only company where only male workers are recruited as casual/temporary workers. This is because the unit is involved in diamond cutting and polishing done by male workers who receive piece rate payment. So of the six companies only in three is there a feminisation of flexibilisation.

It is important to go into the available details on the policies of flexibilisation adopted by different companies and to see how these policies are gendered. The gender division of labour is linked to the policies of casualisation of women followed by companies like Dimple Jewellers and Pratap Diamond Jewellers. Though the wage levels of all women are not necessarily lower than those of all men, the scale of wage levels in the wax department is the lowest in all the companies. However, the variations in the wage levels across companies are much larger than the variations in the wage levels of men and women within a company. I will next examine each company in turn.

Raghav Jewellers

As can be noted from Table 6.1, all production workers in Raghav Jewellers are on casual and temporary contracts. According to Kohli, the Managing Director and owner of the company, 'I keep all my workers on temporary contracts. This means a better control on their productivity and saves me the hassle of paying social security benefits.' The women workers in Raghav Jewellers are kept on a permanently casual state on a continued basis.

On the policy of the company to prolong the temporary and casual status of women workers, Kohli commented 'We tell the women that you have not as yet learnt the work, to prolong their casual status. This is because I pay Rs 1200 per month during the course of training and Rs 1500 per month on completion of the training.' The training would last up to a year. After the period of training none of the women workers were given a permanent position, but they were put on higher grades. Thus on the one hand the need for 'training' in the wax department is not recognised by most of the companies and on the other hand the apprenticeship period of women workers is prolonged in companies like Raghav Jewellers in order to avoid paying benefits like PF and ESI. The case of Raghav Jewellers draws attention to the additional practices of flexibilisation adopted for women workers, by way of a refusal to recognise the skills invested in the labour process by prolonging their trainee status.

As regards the experience of the workers regarding their temporary and casual status, most expressed apprehension. According to Kavita, a woman worker in wax casting: 'All of us are casual or temporary workers in this company. This makes me feel insecure and I am doing a part time beautician course in the evenings, to open another option for myself.' However, for some other workers, like Ayesha, informal relations with the Production Manager gave a false sense of security: 'Adit *Bhaisahib* [elder brother] helped me get this job. I understand it as a permanent job.'

Some literature on flexibility sees the growth of flexible firms as a way forward from the crisis in traditional capitalism and from firms opposing unions (Piore and Sabel, 1984).

The firms in my study are small and are not in a post traditional capitalist stage, nor is there a clear threat of trade unionism due to restrictions on unionisation in the zone. However, the flexibility of the workers does further reduce the possibilities of any informal unity among the workers. According to Sulekha: 'We do not have any trade union or a body of workers to address our problems. All the workers are on temporary contracts, so that they do not have as much stake as a permanent worker does. Also there is a fear of job loss.'

As regards numerical flexibility of the workers, Raghav Jewellers does have a policy of overtime, but it is not compulsory for the workers. According to Kohli 'We ask all the workers to work on weekends sometimes, and have night overtime work for the male workers.' Because of restrictions on the night work of women it can be said that male workers are more flexible in their hours of work than women workers. However, since the overtime here is not compulsory, it gives women and men the flexibility to decide on it. Thus, according to Gayatri Devi ' There is an overtime duty on some weekends, but I do not take it.' On the other hand Alok of Raghav Jewellers said 'I like to do overtime work to earn the extra money.'

As to the functional flexibility of the workers, there is a gender division of labour with women in wax casting, quality control and packing sections and men in master making, gold casting, stone studding and polishing sections. However, there is functional flexibility for some women who are trained in both quality control and wax casting. However, in my follow up visits to the houses of the women respondents I was told that

of the five women workers only one woman who knew both quality control and wax casting was retained.

Dimple Jewellers

Dimple Jewellers has the highest differential in the proportionate representation of women in flexible work as compared to men. As can be seen from Table 6.1, while all women here are temporary or casual workers, 38.5 % of all men are temporary or casual workers. Women are kept as 'permanently-casual' workers in the company. This is the typical policy of Dimple Jewellers, where the management keeps a large majority of women at very low wage rates, as temporary workers for prolonged periods. These workers are not issued any appointment letter and their gate pass is made anew after every two months. This relieves the company from making PF contributions, providing ESI to the worker or of making provisions for any earned or maternity leave.

As regards the perception of the workers, there are some women respondents like Amita who are not aware of the difference between permanent and temporary work. However, many other women expressed their dissatisfaction at the temporary nature of the work. Purnima, when asked to comment on her work, said:

> It's all right. But the problem is that they do not give promotions. Like I have been working for the last 3-4 years. So that I should have had ESI card, and a higher salary. But when one does not get all this one feels very sad. If I had an ESI card it would have been helpful to show my children to the doctors, when they fall sick. This makes me feel sad and dissatisfied, otherwise I do like to work.

Jyoti, another woman respondent working in the wax department also expressed her resentment at her continued temporary status:

I raised the issue of permanency many times with the management. They would just say, if you want to work in our factory you may work or you may leave. This is the case with all the women in this Company. None of us is permanent, nor do we get any bonus, leave or any other benefit. But every time I raise the issue they say you may leave - what can I say after that? I have got used to this Company so I am not looking for alternative jobs. Sometimes they would just give us false hope that they would do it in the future.

Unlike the case of Raghav Jewellers, here the women did protest against the non-issue of permanent gate passes, by sitting outside the zone, but the protest was disrupted and was not successful. The policy of a casual and temporary stream of women workers serves solely the interests of the employer, by providing financial and numerical flexibility to the company. It is important to note here that the continued temporary status of women is primarily motivated by the need to cheapen women and not to create a dispensable workforce, though that is another implication of the policy. The policy of keeping women as permanently casual workers is accompanied by policies of compulsory overtime, which gives additional numerical flexibility to the employers. However, here the workers have little choice in deciding whether to do the overtime as it is compulsory for all. As Alka explains:

> I do like to do overtime work when it comes on most days. However, there are times when my children have exams and I would like to be at home with them on the weekend. But I cannot refuse the management for fear of losing my job.

In Dimple Jewellers there is a strict gender division of jobs with women segregated in the wax and quality control departments. Even within the 'women's jobs' there is little functional flexibility. Some women are trained and continue to work in certain subprocesses, in order to enhance their efficiency and help prevent their moving to other companies. Purnima explained how she was involved in a subprocess of cleaning in the wax department:

I have always been in cleaning. When I started working, I did not know which tasks are better. I had to do whatever task they would have assigned me. Since beginning, they have asked me to do the same work. I would like to do other tasks as well. So that if I learn other tasks and have to change the job, I will have better prospects and a higher salary. Like in Bharat Ratna Jewellers if one knows all the tasks one gets Rs 3000. But here they do not let me learn all the tasks.

Thus functional rigidity and specialisation is encouraged here to increase the efficiency of the workers and to prevent the mobility of workers to other companies.

Pratap Diamond Jewellers

Pratap Diamond Jewellers is second among the feminised flexible companies. Here 35.8% of all female and 14.7% of all male production workers are on temporary and casual contracts. Pratap Diamond Jewellers employs large numbers of women as trainees in wax stone setting at a very low wage level and the women's contracts are terminated within three months on the plea that they have not learnt the work well and a fresh group of women trainees taken on. This policy of a rotating pool of women workers provides a financially and numerically flexible labour force. The strategic dismissal of the majority of women within three months helps the company to keep its labour costs low and to pay permanent training rates with no social security benefits. For example, Meena was terminated after two months of training when she could not meet the target of a hundred diamond settings in a day. The company also gets extra numerical flexibility from the women workers in wax stone setting who are forced to do overtime for no payment.

It is important to note that even the workers who are permanent may not have this confirmed through an official letter. As Gayatri said:

> I get the PF and ESI but I do not know that I am permanent and I have not been given any appointment letter. No one in our company has been given any appointment. There are other companies, which have issued the appointment letters.

Not all the women workers in Pratap Diamond Jewellers were unhappy however. Meeta, who is a graduate and working as a wax department supervisor and drawing Rs 3500 per month, is satisfied with her job. There is little functional flexibility of male or female workers here.

Victor Jewellers

Victor Jewellers is the third company with the most feminised flexible work force. Here 16.6% of male and 20% of female production workers had a temporary and casual status. In Victor Jewellers also the percentage of casual/ temporary women employees is greater than that of the male employees. Policies of casualisation cheapened the labour force by enabling the avoidance of higher wages and benefits like PF, and EL. The export manager of Victor Jewellers, Mongia, did inform me that the temporary workers are made permanent in 3-6 months, after the completion of the training period. However as one woman worker, Mansi, explained: 'They initially told me that I would be made permanent after three months. However, now it has been six months and I am still a temporary worker.' As in the case of Pratap Diamond Jewellers, many workers deemed permanent are also not issued any letter of confirmation.

Additional numerical flexibility is gained by making the women workers do overtime. According to Mansi 'They make me work overtime for an hour or two on some days and

do not even make any payment for the same. Sometimes I feel dissatisfied and want to leave. However, I have little choice at the moment.' The policy of forced overtime without payment is not followed for the male workers. Male workers are paid overtime with payment commensurate to their wages. However the stipulated double payment is not made even here. There is little functional flexibility of workers in this company, as elaborated by Mongia: 'We train the workers in a job and retain them in the same job and do not shift the workers from one job to the other.'

Chandra Jewellers

Chandra Jewellers is the only company which has a masculinised flexible workforce, with 19.5% of men and none of the women on temporary and casual contracts. The Production Manager, Navneet, explained this:

> We like to keep all our workers on permanent contracts to give them a sense of security. However, in case of cutting and polishing of diamonds the workers are on casual contracts and are paid by the piece. This is because there is a need to be very strict on the quality control here and also to bring out the best productivity of the worker. Moreover the work available varies from time to time. Since only men are suitable for this job you will find some men on casual contracts.

In Chandra Jewellers the men working on a piece rate basis provide numerical and financial flexibility to the firm. Banerjee's (1996) assertion of flexible work conditions existing with a masculinised workforce, because of men being preferred for the job, holds here. However, it is not that the general conditions of flexibility are existing in the market, but that the nature of the job requires it to be flexible. At the same time Chandra Jewellers maintained a strict policy on the gender division of labour, so that Elson's (1996) assertion that the gender division of labour is not overridden by flexibility also

holds here. However, it is the masculinised jobs which provide the financial and numerical flexibility. The company did not gain additional numerical flexibility through overtime requirements for its workers.

None of the female or male respondents on permanent contracts had been issued any letter confirming their permanency. Some women respondents said that they had been issued a letter at the time of appointment, which was later taken back from them. It is also important to note that though casual and temporary workers are more easily dispensable, many permanent workers were retrenched during the course of my first nine months of fieldwork. This was due to a decline in export demand for the company's products. One of the male respondents, Ajay Manna, was issued a notice of inefficiency and non-alertness prior to retrenchment. A woman respondent Roopa, on the other hand, was asked to resign voluntarily and no prior notice of any kind was issued.[2]

Of the two men and three women respondents interviewed, only one woman, Mrinalini was continuing in her job at the time of the follow up interview. Mrinalini was functionally flexible and had worked in the quality control, wax and stone studding departments. Most of the other woman respondents who were terminated had only worked in the wax department. Mrinalini's case reveals the inverse relationship between functional flexibility and numerical flexibility, noted by Walby (1989).

Bharat Ratna Jewellers

Bharat Ratna Jewellers is the only company where all male and female production

workers are on permanent contracts. Anil Bhatnagar, the managing director of the company, explained: 'We keep all our workers on permanent contracts, to build up their allegiance to the company.' This company does not have any policy of overtime work for the workers, so they are neither financially nor numerically flexible.

However, there is some functional flexibility among the workers. This was explained by Anil as follows: 'Different processes work at a different pace and we have to manage accordingly to keep all the workers fully occupied at all times. So that some workers are trained in more than one task. It is through this monitoring that we assure that the company can meet the export demand in the right time.' Savita, a female production worker, and Hari, a male production worker affirm this. According to Savita 'I am normally involved in quality control and checking. However there are days when I also do packaging after finishing on quality control.' According to Hari 'I do polishing and plating of the jewellery pieces. But intermittently I also follow up the quality control and packaging though I never myself actually do it.' Thus, here the functional flexibility of the workers is accompanied with a gender division of labour and both women and men are functionally flexible within jobs defined as women's and men's. Thus Elson's (1996) assertion that the gender division of labour determines the nature of flexibility is true here. The functional flexibility of the workers is not linked to changes in demand, but is resorted to keep the workers fully occupied at all times. The inverse relationship between functional flexibility and numerical flexibility is not noted here.

From the above analysis of the nature of flexible practices followed in the six companies

it can be said that there is a slight feminisation of financial and numerical flexibility in that there is a greater proportional representation of women as casual and temporary workers. Four of the six firms resort to additional measures of flexibility through overtime work. Only in the case of Raghav Jewellers is the overtime work optional for the worker. In the other three firms, flexible overtime work is compulsory for the workers and is especially imposed on casual and temporary workers, and at Raghav Jewellers and Dimple Jewellers the workers are paid at half the legal rate for overtime work. Pratap Diamond Jewellers and Victor Jewellers make workers, especially the women workers with casual status, work free for them.

While there is little functional flexibility of workers in Dimple Jewellers, Victor Jewellers and Pratap Diamond Jewellers, at Raghav Jewellers, Chandra Jewellers and Bharat Ratna Jewellers there is a measure of functional flexibility by workers. However, men are not necessarily the more functionally flexible work force. In fact in the case of both Raghav Jewellers and Chandra Jewellers the functional flexibility is noted for two women. Though the sample is too small to generalise from, the two cases of functional flexibility here bear an inverse relationship to numerical flexibility, as is noted by Walby (1989). While, on the one hand some companies retain the functionally flexible workers at the time of recession, there are other companies like Dimple Jewellers, which follow a policy of specialisation of tasks for some workers, to retain them in the company and to reduce their mobility.

6.4.2 Control and Autonomy

In the context of machinemade jewellery production, the numerical flexibility of the workers through their status as casual and temporary is resorted to by firms and the workers have little control or 'choice' over this. As noted in the context of Dimple Jewellers, the protests by the women workers seeking to gain permanency had little result. The bottom-line in all the cases is that the workers fear losing their jobs. Even in the case of overtime work, only in Raghav Jewellers did the workers have a real choice. So to the question of whose flexibility, raised by Huws et al (1986), the answer is that the flexible policies serve solely the employer here. In response to Elson's (1996) comment that flexibility should be judged in terms of erosion of worker's rights and their ability to organise in defence of those rights, it can be said that the nature of flexibility in machinemade jewellery production in the zone is clearly not a desirable one for either the male or the female workers.

As regards Bravermanian control over the work task, most of the workers - men or women - have little control over the labour process, but are engaged in some subprocess in a chain of processes. However, the master makers and women in quality control do have a greater freedom to use their innovativeness. This is how Pradeep, a mastermaker, described his task:

> A design and all the specifications of height, weight, breadth etc are given. In the case of some masters, pieces are joined together. But in other designs the master is made in a single piece by making a hollow. The design can be prong or any other type. I have to think how best to make the master. I make the master from the design provided to me, but sometimes I am told to make some variations in the design. This involves a lot of thinking.

Preeti, who works in quality control, said 'I like this work better than the wax injection I did in the earlier company because it allows me to use my judgement.' In all other processes of wax casting, gold casting, polishing or stone studding little innovation is required. Quality control on the face of it seems to give women certain control over the quality of men's work. However, the organisation of quality control is in a separate section, where women sort out jewellery according to the nature of the defect, if any, and the department to which it has to be sent. A person from the management, then sends this jewellery back to the relevant section so that women have little direct authority over men. Three of the companies keep a record of the pieces injected and cleaned in the wax department, and Pratap Diamond Jewellers records the number of settings of diamonds made in wax. According to Sunyana, working in wax stone setting in Pratap Diamond Jewellers:

> They keep a detailed record. In a month who has set how many diamonds, in how many seconds, in how many minutes, they keep all record. They keep account of the use time - what time we got the diamond, what time we finished the setting and what time we deposited the piece back, all the details are noted and a monthly record is kept. At the end of the month it is told who studded how many diamonds in how many minutes.

Pratap Diamonds and Dimple Jewellers also set a target output for the women workers in wax setting and wax departments. According to Sunyana:

> First they said you have to give 2000 settings in a month. When we reached the target they said now you will have to give 2500. When we reached the higher target, they raised the target further to 3000 and like that. The day before yesterday they raised the target to 7000.

Some nominal incentives to meet the target output are given to the workers. In Dimple Jewellers, the management forced the workers to sign to meet the target output in wax

injection and cleaning. This was resented by many workers but in the absence of a trade union or any fall back, there was little that the workers could do.

Among the masculinised jobs, individual records of stone studding are maintained at Pratap Diamond Jewellers and Chandra Jewellers. As stated before, men in diamond cutting in Chandra Jewellers are paid only piece rate and here too individual records are maintained. All companies maintained group records for all the sections.

From the above analysis one can conclude that though there are differences in the extent of control exercised over the workers in different companies, the workers overall have little autonomy in deciding their hours of work or even overtime work. The company determines the work task of the workers and all the companies maintain records of the output. However, a closer control is maintained in the wax casting and wax setting sections, which are feminised, and in the stone studding section, which is masculinised. Control over the work task and over the pace of work is not necessarily greater for male workers than female workers.

6.4.3 Flexibility and Gendering

From the analysis of flexibility one finds that of the six firms two have no gender disparity in the flexibilisation or otherwise of the workforce: workers of both sexes are either fully permanent or fully flexibilised in terms of contractual status. The flexibilisation of labour is gendered in four companies, of which flexibilisation is

feminised in three and masculinised in one. So there is a slight feminisation of flexible work overall, but it is not very marked. In the context of the dual categorisation of the workers as temporary and permanent, there are many permanent workers who are not issued any letters of permanency. Amongst my respondents, some permanent workers have even had their work terminated, by forcing them to resign or by making charges of inefficiency against them. Thus a permanent status is no guarantee against flexibilisation. Women are overall the more flexible work force by status and the flexible status is in many cases linked to lower wage levels. A casual or temporary status did imply easy dispensability, but a permanent status also has little guarantee against it.

As to the debate on the link between policies of flexibilisation and the gender division of labour, flexibility does not reduce the gender division of labour. In the case of Pratap Diamond Jewellers, a gender division of labour on the shopfloor, with women in wax stone studding, is closely linked to the policy of a rotating pool of labour, with many of the women made redundant on or before the completion of the training period. There is no instance of women substituting for men due to the needs of a numerically flexible work force. Thus, again, Elson's (1996) conclusion that flexibility is structured by the gender division of labour seems to be validated here. However, in the case of Chandra Jewellers flexible labour is masculinised and Banerjee's (1996) assertion that flexibility can coexist with masculinised work force is substantiated. As regards functional flexibility, men are not necessarily more flexible than women.

6.5 CONCLUSIONS

The employer-worker dyad is complicated in the case of handmade jewellery production, due to the presence of contracting/subcontracting in all the three sites. However, in the case of machinemade jewellery production the entrepreneur has a direct relationship with the workers. While subcontracting implies complete financial flexibility for the entrepreneurs in all the three sites of handmade jewellery production, flexibility in machinemade jewellery production is limited to casualisation and dispensability of the workforce in severe cases of a decline in demand. Thus entrepreneurs in machinemade jewellery production incur *fixed* wage costs in most instances, irrespective of demand. Only in one case, of women recruited to wax stone studding in Pratap Diamond Jewellers, is the labour cost related to changes in demand, by treating the workers as a rotating pool most of whom are terminated within three months.

As regards numerical flexibility, the system of subcontracting implies considerable flexibility for the entrepreneurs and contractors in the villages of Medinipur. In case of a rise in demand the contractor could vary the hours of work of the employees in his workshop. However, in both Delhi and NEPZ the extent of numerical flexibility available to the contractors, and the potential hours of work that can be extracted, are even greater because of the coresidence of employees, artisans, and child/young workers in the communal space of a workshop. In machinemade jewellery production the numerical flexibility of the entrepreneur is limited to dispensability of the workers in extreme cases of continued shortage of demand. In case of a rise in demand, overtime work is resorted to in a few cases. Using Elson's (1996) contention that flexibility be judged in terms of

the erosion of worker's rights and the ability to organise in defence of the rights, there is little semblance of any rights for the different actors in handmade jewellery production in any site. The labour market is kinship based and there is little scope for any organisation of artisans, subcontractors or employees. In machinemade jewellery production the labour market is formal, but the practice of flouting labour legislation is common and there is a restriction on unionisation here.

Concerning functional flexibility, there is little need for artisans/subcontractors, employees and child/young workers to be functionally flexible in the villages of Medinipur as all the sample workshops are catering to only one demand, that for silver jewellery chains. In handmade jewellery production in Delhi, the contractor has a big pool of artisans and employees who specialise in different processes or groups of processes, which can be used to cater to demand for different types of jewellery - chains, plain jewellery sets or enamelled jewellery. In NEPZ the entrepreneur can tap only the artisans, employees and child/young workers residing within the factories of NEPZ, because of restrictions in getting gold processed outside the zone. In none of the cases are the artisans, employees or child/young workers functionally flexible to take care of the changes in the nature of demand. Four of the six companies engaged in machinemade jewellery production, are also engaged in handmade jewellery production, but there is no movement of workers from one to the other type within the company. However, some men engaged in master making in the companies were engaged in handmade jewellery production independently from home. There are certain instances of some women workers who knew more than one process being retained when many others who did not

were terminated. The functional flexibility of the workers here does not imply the capacity to cater to different types of demand, but means that with decline in demand some workers can perform more than one task in the event of other workers being terminated. Bharat Ratna Jewellers, the only firm with all permanent workers, trained some workers in multiple tasks to keep them fully occupied at all times.

As regards the experience of flexibility and control over production of the various actors, in the villages of Medinipur the artisans have greater flexibility to decide their hours of work. There is little pressure of demand and they have to divide their time between jewellery work and working or supervising in the fields, which is an additional source of income. Even employees and child/young workers have greater numerical flexibility in the village as compared to Delhi and NEPZ, because of the non-residence of the artisans in the workshop. In Delhi and NEPZ, the artisans, employees and child/young workers have little flexibility in work hours, which are on average much longer than in the village. However, the numerical flexibility in the village has to be seen in the context of low pressure of demand and unavailability of work. Kinship is an important form of control in all instances.

For the women workers in the villages of Medinipur, engagement in chain weaving and soldering is accompanied by household work, which means little numerical flexibility over the day. For the women engaged in soldering in the villages, and the few women engaged in jewellery work in Delhi, their work is constituted as 'help' to their husband and is an additional source of flexibility for him. In machinemade jewellery production

the hours of work are fixed and in most cases the overtime work is also compulsory. so that there is little flexibility for workers to 'choose' their hours of work.

In all the sites and forms of production labour market flexibility occurs with a gender division of labour. Elson's (1996: 40) contention that the gender division of labour confines women to relatively subordinate and inferior positions in the organisation of monetised production is broadly true. Only the few women doing soldering work in the village and the set work in Delhi cross the gender division of labour, making Standing's (1989) assertion that flexibilisation leads to women substituting for men true in a limited way. However, this does not elevate the position of women for here their work is constituted as *help* to men and is outside the monetised economy.

In the handmade jewellery sector in Delhi and NEPZ, labour market flexibility is occurring with a largely masculinised labour force, which reasserts Banerjee's (1996) position rejecting the relationship between globalisation, flexibilisation and feminisation.

In machinemade jewellery there is a slight feminisation of flexible status but it is not marked. So Elson's (1996) contention that the gender division of labour is not overridden by flexibility is broadly supported. Her assertion that the form of flexibility is determined by the gender division of labour can be seen in the limited numerical flexibility available to women in the villages of Medinipur in comparison to men, due to the broad gender division of work there. All household work is done by women and chain work has to 'fit' in with other work. In the context of handmade jewellery production the broad gender

division of labour, with women 's identities as housewives and the discursive practices of control over their (hetero) sexuality, prevents women from migrating from the village. This helps the contractors in organising work in the workshops, where all male artisans, and child/young workers reside and provide complete numerical flexibility to the contractors. In machinemade jewellery production, there is some feminisation of flexible status, and a persistence of the gender division of labour. The gender division of labour, however, does not determine the nature of flexibility in all instances.

From the above analysis it can be seen that the validity of the various contentions about the relationship between flexibility and the gendering of the labour process are variable across different contexts. This underlines the importance of detailed and located studies such as this.

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[1]Though wages and salaries are considered as variable costs in contrast to fixed costs like buildings and machinery, when referring to fixed costs of employing labour I mean employment of permanent workers who have to be paid a wage irrespective of the availability of work.

[2] According to Section 25F of the Industrial Disputes Act, 1947 the employee must be given one month's notice in writing indicating the reason for retrenchment and retrenchment must be effected after expiry of period of notice or the employee should be given wages for the notice period in lieu of such notice. The employee should be paid at the time of retrenchment, compensation equivalent to fifteen days average pay for every completed year of service or any part thereof in excess of six months. (Kumar, 1995).

CHAPTER SEVEN

CONCLUSIONS

7.1 INTRODUCTION

In this chapter I outline the major conclusions of my thesis and the contribution of the study to the existing literatures. The chapter is divided into two main sections, plus the introduction and the scope for future research, on the basis of the two key analytical questions explored in the study. These are:

1. What are the gendered processes that constitute the feminisation and masculinisation of jewellery production in the three sites - NEPZ, Delhi and Medinipur?
2. How does feminisation and masculinisation in different sites and forms of jewellery production relate to flexibility?

Each section is then subdivided into three subsections according to the sites and forms of production. The last section outlines the scope for future research.

As noted in Chapter 2, my study broadly draws from two strands of literatures. One is the gendered literature on EPZs and EOIs and the second is the literature on globalisation, feminisation and flexibility. I have used an eclectic conceptual framework to analyse the processes of gendering of the labour market in different sites and forms of

jewellery production. I have examined the role of discourse, social practices and masculine and feminine subjectivities and identities, in order to understand the feminisation and masculinisation of the labour market in jewellery production. The study also analyses the nature of flexibility and the experience of flexibility together with the control and autonomy of different actors in different sites and forms of jewellery production. This analysis of the experiences of flexibility for different actors leads to the second major analytical issue explored in the study, namely the relationship of the gendered labour process to flexibility.

Before going into the theoretical contribution of my study, I would like to indicate that the study is unique in its scope, which extends beyond the boundaries of the NEPZ to cover Delhi and the villages in Medinipur. As indicated in Chapter 3, the initial decision to cover Delhi was taken by me to bridge the absence of a comparative standard for women workers in the existing gendered literature on EPZs, an absence raised by Lim (1990). However, evidence gave way to new research questions on the ground. The incorporation of handmade jewellery units and workshops in Delhi has been useful not just in widening the scope of the study but also in bringing out the complex dynamics of the incorporation of women as hidden unpaid family workers. The decision to incorporate Medinipur, which came about much later in the fieldwork, has enabled me to analyse the complexities of the labour process in handmade jewellery production in NEPZ and Delhi, which are related to Medinipur through migration. It has helped to bring out how different production relations and gender divisions of labour are reproduced and sustained in different but interrelated sites. Medinipur has also shown that there is a

majority female labour force, which was completely unknown and the opposite of what was expected. In fact it is the best-kept secret in the jewellery industry! The analysis of machinemade jewellery production in NEPZ adds to the richness of the study by moving on to that part of the jewellery production where the labour process is more formal and close to capitalist mass production relations.

7.2 THE PROCESSES OF FEMINISATION AND MASCULINISATION OF JEWELLERY PRODUCTION

The study contributes to the existing gendered literatures on the EPZs by detailing the *processes* of feminisation and masculinisation of jewellery production in NEPZ. Through its analysis of the role of discourse, subjectivity and practice in the gendering of the labour market in handmade and machinemade jewellery production in NEPZ the existing literature on EPZs is enriched.

7.2.1 Chain Production in the Villages of Medinipur

The labour process in chain production in the villages of Medinipur is characterised by an informal labour market sustained through kinship networks and subcontracting and the presence of a majority female labour force that is almost completely disguised from public view or public knowledge. Women are the majority labour force in silver chain production, accounting for nearly 64 percent of the labour time. They are largely engaged in chain weaving, work from their homes and are hidden both visually and discursively.

Male artisans and child/young workers work in the visible space of the workshop and are engaged in chain soldering, finishing and polishing. My analysis of the gendering process in the villages of Medinipur shows that the discourses of denial and marginalisation of women's work in chain weaving, and the construction of men's work in soldering and finishing as 'tough' and 'real', are hegemonic among men in the public sphere. The investment of men in these discourses is tied to the masculine identities of men as breadwinners, which construct the identities of women in opposition as housewives. Women's discursive position is more complex and varied. While a majority of women recognise their work in chain weaving as work, in many instances they do not consider themselves as breadwinners and reinforce their identities as housewives. Women invest in the discourse and practice of seclusion, which confine them to the home and prevent them from being occupationally mobile, in order to reinforce their subjective positions as 'good women'.

The discourses of denial and the marginalisation of women's work are tied to the discursive and social practices of seclusion of women and to the material practices of very low wage rates for chain weaving, with little possibility of occupational mobility. The discourse that male work in chain soldering and finishing is 'real' and 'tough' is tied to the practice of formalising and prolonging the training of male child/young workers in the workshops and to better wage levels for men in chain soldering and finishing, with a possibility of occupational and geographical mobility. My study shows that the constitution of feminised work in chain weaving as low skill, low value, 'light', 'static' and as a 'leisure' activity helps to constitute women as occupationally unskilled, physically

delicate and socially immobile, as weak beings in need of protection and confined in the home, characteristics which contribute to the construction of women's identities as 'housewives'. On the other hand, the constitution of male work in chain soldering and finishing as skilled, high value, 'tough' and 'dynamic' helps to constitute men as occupationally competent, strong, and as geographically and socially mobile, characteristics which contribute to the construction of men's gendered identities as breadwinners. When a few women cross the boundaries of the gender division of labour to do chain soldering and finishing their work is constructed as *help* to their husbands, is unpaid and is undertaken from within the confines of their homes, thus helping to contain the challenge to men's gendered identities posed by women's performance of 'masculine' work.

7.2.2 Handmade Jewellery Production in NEPZ and Delhi

My study of handmade jewellery production in NEPZ and in Delhi has shown a complete absence of women from the production process of handmade jewellery in the zone and their marginal presence as 'hidden', unpaid family workers in Delhi. This difference in the two sites is because the contractors in Delhi have their domestic space adjacent to the workshops, so that it is possible for them to use the labour of their wives from within the domestic space. However, in NEPZ the contractor cannot have a domestic space in the zone and there are restrictions on taking the gold out of the boundaries of the zone, which mean that the contractor cannot use such unpaid labour. The labour process of handmade jewellery production in Delhi and NEPZ is characterised by subcontracting, is organised

informally and has a majority presence of men and male child/young workers who are migrants from the villages of Medinipur. The labour here is inducted into the production process through real and fictive kinship networks.

The discourses of denial and of marginalisation of women's work in the public spaces occupied by men are popular here, as they are in the case of Medinipur. However, unlike the case of Medinipur, where most women recognise their chain work as work, here the few women who are involved in jewellery work invest in the marginalisation of their work as *help* to their husbands. This difference is tied to their position as unpaid family workers in Delhi, with no independent claim to income, in contrast to the position of women as homeworkers in Medinipur who earn a piece wage.

The discourses of denial and marginalisation of women's work, the discourse on the moral protection of women and the discourse on men's handmade jewellery work as 'tough' are tied to the discursive and social practice of seclusion of women and the organisation of handmade jewellery production in the communal environment of the workshop, from where the women are largely excluded. These discourses and practices feed into the subjective identities of men as providers and breadwinners and the construction of women as housewives and helpmates. It is also important to note that it is the construction of women as housewives and the control over their (hetero) sexuality which prevent women from migrating independently from the villages of Medinipur to Delhi in the first place, and inhibit any occupational or social mobility on the part of the women except through the husband.

7.2.3 Machinemade Jewellery Production in NEPZ

Machinemade jewellery production in NEPZ is characterised by a one fourth representation of women in the wax casting, quality control and packaging departments. Men are the majority work force here and predominate in the master making, gold casting, stone studding, filing, polishing and plating departments, but the minority female workforce is recognised as 'employed labour' rather than 'unpaid family labour' or 'invisible leisure activity'. There are wide variations in the wage levels across the companies and the inter firm difference in the wage levels of women are greater than the intra firm differences between women and men. Though women are not necessarily the cheapest source of labour, the wage levels in the wax casting department are the lowest in all the companies. There are also gender differences in the perception of the skills of men and women, in the greater transferability of some male skills to handmade jewellery, and in some company policies, such as keeping women as 'permanently casual' workers. As compared to the overall representation of male workers at 75%, men are over represented at 98.6% amongst skilled workers and underrepresented at 67.5% amongst semi skilled and 65.18% amongst unskilled workers. Women, on the other hand, have a negligible representation at 1.4% amongst the skilled workforce and are over represented at 32.4% amongst the semi skilled and 34.8% of unskilled workers, relative to their overall representation at 25%.

In the context of machinemade jewellery production, 'male' tasks of master making, gold casting, polishing, stone studding and filing are constituted discursively as 'dangerous',

'difficult', 'complex', and 'tough' work requiring training. The performance of these tasks helps to construct the gendered subjectivity of men as 'bold', 'tough', 'dynamic' and 'skilled' workers. The feminised jobs in the wax department and in quality control are constituted discursively as 'light', 'simple', 'repetitive', 'detailed', 'soft' and 'static', requiring little training. Women who perform these jobs become constructed as 'delicate', 'patient', 'nimble fingered' and 'unskilled'. The dual discursive constitution of male and female jobs and the construction of men and women performing these jobs as in opposition is power laden, where men have more power and are better valued as workers than women. The characterisations bold/delicate, tough/nimble fingered, dynamic/ immobile, skilled/unskilled, with the former being associated with men and the latter with women, resemble closely the polarities at work indicated by Game and Pringle (1983: 28-29). These discourses on gendered work sustain the practice of a gender division of labour in machinemade jewellery production.

The analysis of the gendering of jewellery production in different sites and forms of production, using the conceptual tools of discourse and gendered subjectivities, has been helpful in bringing out the agency of both men and women in structuring the labour market. The analysis contributes to the existing gendered literature on EPZs, and, in bringing out the agency of women, answers the criticism of Ong (1988) that the gendered literature on EPZs reduces women to their status as a source of cheap labour, and gives little importance to the social meanings their work has for them.

My study of the handmade jewellery production in Medinipur, Delhi and NEPZ has shown that though the discourses of men are predominant in the public sphere, women show their agency in either contesting or investing in the discourses and in constructing their subjective identities. The subjective identities of women as housewives or as 'good women' are not autonomous, but are structured by relations of power.

In machinemade jewellery production, although men and women have little choice in deciding the department where they work, both men and women invest in the discourses which construct certain jobs as masculinised and others as feminised. In investing in the discourses on masculinised and feminised jobs, men and women show their agency in constructing their gendered subjectivities as 'masculine' or 'feminine'.

7.3 FEMINISATION, MASCULINISATION AND FLEXIBILITY OF THE LABOUR FORCE

The second major analytical issue explored in my study is the relationship of feminisation and masculinisation to flexibility in the context of the debates in the literature (Standing, 1989; Elson, 1996; Banerjee, 1996). To understand the relationship of the gendered labour process to flexibility in the micro economic context of my study, I analyse the nature of flexibility and the experience of flexibility for the different actors in different sites and types of jewellery production, and the control or autonomy which this entails for each actor. In analysing the experience of flexibility for different actors in the chain of production relations the study goes beyond the worker-entrepreneur dyad. The

intermediate actors, such as contractors, artisans/subcontractors, here represent actors who do not just produce surplus value for the entrepreneur but also appropriate surplus value from actors such as child/young workers or women homeworkers and unpaid family workers. I use all the three concepts of flexibility identified by Elson (1996), namely financial, numerical and functional flexibility.

The high technology model of flexibility, representing a post Fordian break in technology and conceptualised as the second industrial divide by Piore and Sabel (1984), has little applicability in my study. Handmade jewellery production in Medinipur, Delhi and NEPZ represents a flexible artisanal mode of production, which is characterised by the prevalence of a 'hierarchy of contracting and subcontracting'. The machine-made jewellery production in NEPZ is in the nature of mass production, with no subcontracting of production. Financial and numerical flexibility for the entrepreneur in this case is related to policies of casualisation of the work force and through overtime use of the workers in some cases. I now take up the major conclusions on the issues around flexibility, which emerge from the different sites and forms of jewellery production.

7.3.1 Chain Production in the Villages of Medinipur

My analysis of the nature of flexibility and the experience of flexibility for different persons in the production chain in Medinipur shows that the nature and experience of financial flexibility for different persons differs with their position in the hierarchy of production relations. The persons higher up in the production chain have greater financial

flexibility than persons do at the lower levels. Thus the entrepreneurs and contractors have considerable financial flexibility. Artisans/subcontractors have some financial flexibility through child/young workers, but are largely a source of financial flexibility for the contractor. Employees, child/young workers and women homeworkers in chain weaving and soldering are all a source of financial flexibility.

Numerical flexibility by and for a person is related to the question of choice of work and of working hours, and to issues of control. As regards the freedom to choose to work at all, there is little option or fall back without work except subsistence agriculture for some. As to the choice between work and leisure, only some better off contractors have the freedom for leisure. For the other contractors, artisan/subcontractors and employees, most hours not spent in chain work are spent in agricultural production. However the contractors and artisan/subcontractors have greater flexibility to choose the hours of work than the employees do. For women homeworkers involved in chain work 'choice' in hours of chain work means little choice over the day given all their reproductive work although much of women's work is constructed as leisure. Flexible work understood as serving the interests of the women in the short run, as postulated by Elson (1996), does not apply here. In terms of Allen and Wolkowitz's (1987) work detailing controls over the nature of the work task, output or work quality of women homeworkers, while none of the women engaged in chain weaving or soldering has any control over the work task, many women said that they engaged in self surveillance on the quality of their work. Though women apparently do have some control on the extent of output they produce, this limited control is in the context of an otherwise full day. Moreover the choices of

work which women have are limited by the discursive control over their mobility and (hetero) sexuality, which constructs them as housewives confined to the home.

The numerical flexibility for child/young workers is severely constrained due to the fictive and real kinship controls. There is little meaning of functional flexibility here, as silver chains are the only jewellery item produced. The division of different tasks across different artisans means that none of the artisans has complete control over the output produced.

One notices labour market flexibility is widely present in chain production in the villages of Medinipur. However, this labour market flexibility prevails embedded in a gender division of labour, with women largely engaged in chain weaving and men in chain soldering and finishing. Elson's (1996: 40) assertion that the gender division of labour, which confines women to relatively subordinate and inferior positions in the organisation of monetised production, is not overridden by flexibility is true in the case of the village, for chain weaving is the lowest paid of all jobs and women have little occupational or geographical mobility. Elson's (ibid.) assertion that the gender division of labour structures the form of flexibility can be interpreted here in the context of the broader gender division of labour which constructs women as housewives. Thus although both men and women have some flexibility to decide their hours of work in chain production, the numerical flexibility available to women is constrained by their reproductive responsibilities. However Standing's (1989) assertion that flexibility leads to women substituting for men can also be seen to have some relevance in the context of a few

women who cross the boundaries of the gender division of labour to work in chain soldering and finishing, and provide the flexibility of an unpaid work force to their husbands.

7.3.2 Handmade Jewellery Production in NEPZ and Delhi

As in the case of the villages, the extent of financial flexibility available to different actors in the production chain of jewellery in NEPZ and Delhi depends on their position in the hierarchy of production relations. The entrepreneurs have complete financial flexibility. Contractors are a source of financial flexibility for the entrepreneurs and also derive considerable financial flexibility. The artisans, employees, child/young workers, and women unpaid family workers, are all a source of financial flexibility for others.

The entrepreneurs have little direct relationship with the artisans, so that the freedom to vary the hours of work of the artisans is more in the hands of the contractors here. The co-residence of all the male artisans and employees as well as the child/young workers under one roof in the workshops of Delhi and NEPZ, and related through real and fictive kinship ties to the contractor, gives the contractor complete numerical flexibility to vary the hours of work of these artisans. As to the numerical flexibility of the entrepreneur in terms of control over their own involvement in jewellery work, subcontracting relieves them of supervision of the artisans and gives them the freedom to engage in marketing and retailing. The better off contractors have greater control over their time use, but all the contractors divide their work time between supervision, procurement and making

jewellery. The artisans, employees and child/young workers have very little control over their time use. Women working as unpaid family workers have some numerical flexibility to decide their hours of jewellery work, but this means fitting in their jewellery work with all their domestic work and having little leisure.

There is little need for the artisans and employees to be flexible across different functions to cater to changes in demand, because the contractors have access to a large pool of artisans specialising in different types of jewellery production. However there is some flexibility of the artisans across different processes. Child/young workers are functionally flexible across production and reproduction work and are made to do both forms of work by their mentors in their training period. Women unpaid family workers are also functionally flexible across production and reproduction work and in the context of jewellery work engaged in direct production as well as supervision of the artisans.

Regarding the issue of freedom to work raised by Huws et al (1989), none of the artisans have any real choice in deciding to work or even in deciding their occupation. Poverty coupled with little alternative employment in the village means that many migrated as child/young workers to get absorbed into jewellery production. Individual artisans have very little control over the work task. Most artisans and employees are engaged in a number of tasks such as mixing of metals, wiring, setting and soldering, while others are engaged in individual tasks like edging or polishing. But all artisans and employees work on the designs provided by the entrepreneur or the contractor.

Though kinship ties are important in the induction and control of artisans, employees and child/young workers in all sites, they play a more significant role in the control of child/young workers in Delhi and NEPZ. For here such workers are away from home and residing in the communal workspace of the workshop. Not only are the child/young workers made to run errands by their mentors, and their training period prolonged, but in many cases they are physically abused.

Considering the controls over homeworkers outlined by Allen and Wolkowitz (1987), women family workers, in their capacity as wives of the contractors, do have some control over the work task, quality of work and output. However, this limited control is accompanied by little control over their own labour power. Moreover the nature of their involvement in jewellery work is closely determined by familial considerations.

In terms of the issue of flexibility and the gendered labour process in handmade jewellery production in Delhi and NEPZ, I find the conditions of labour market flexibility existing with a largely masculinised labour force. This labour market has been in existence in Delhi much before the introduction of the SAPs in 1991 in India (As noted in Chapter 4, Kunal Jewellers was set up as early as 1880) and was extended to the NEPZ after the setting up of the zone in 1985. Thus Banerjee's (1996) assertion that flexibility can coexist with a masculinised labour force, and that flexibility is not necessarily connected to globalisation, is supported. The broader gender division of labour, with women at home and men in paid work, coupled with the discursive control on women's (hetero) sexuality, helps to organise the jewellery work in an all male communal workspace,

which provides the maximum numerical flexibility to the contractor. So in a way Elson's (1996) claim that the gender division of labour determines the form of flexibility is also true here.

In all the three sites of handmade jewellery production there is a 'hierarchy of contracting and subcontracting' in which actors in the more powerful positions pass on their disadvantage from financial and numerical flexibility to actors lower down the hierarchy. The actors lower down the hierarchy attempt to move 'out' through migration, 'up' the subcontracting hierarchy and 'on' in terms of social mobility, by reducing their 'flexibilised disadvantage' and accruing 'flexibilised advantage'. This process is deeply gendered because it is only women who cannot in principle move 'out', 'up' or 'on' except through their husbands.

7.3.3 Machinemade Jewellery Production in NEPZ

The financial and numerical flexibility available to different machinemade jewellery firms in NEPZ through casual and temporary labour contracts, and the gendered composition of flexibility, differed across the firms. Three of the six companies - Dimple Jewellers, Victor Jewellers, and Pratap Diamond Jewellers - combined flexibilisation policies with a feminised work force and one - Chandra Jewellers - with a masculinised work force. Of the other two, Bharat Ratna Jewellers had none of their workers as flexible labour and Raghav Jewellers had all their workers as flexible labour. As regards the overall representation of men and women in permanent, casual or temporary status,

men are 77% of permanent and 68.6% of temporary and casual workers. In relation to their overall representation at 75%, men are slightly over represented as permanent and under represented as temporary and casual workers. Women make up 23% of the permanent and 31.4% of temporary and casual workers. Thus compared to their overall representation at 25% women are slightly under represented among permanent and over represented as temporary and casual workers. So there is a marginal feminisation of financial and numerical flexibility, but it is not very significant. However it is important to note that though a temporary or casual status does imply easy dispensability of the workers, permanent status is no guarantee against it. Many entrepreneurs admitted that giving a temporary and casual status to the workers is resorted to cheapen the workers and avoid paying them benefits in addition to their wages.

Four of the six companies - Raghav Jewellers, Dimple Jewellers, Pratap Diamond Jewellers and Victor Jewellers - resort to additional measures of numerical flexibility through overtime work. However, in terms of Huws et al's (1989) question of 'choice', only in the case of Raghav Jewellers do the workers have any choice about their overtime work. In all the other companies overtime work is compulsory and in many cases casual workers are made to do overtime for no payment.

Raghav Jewellers, Dimple Jewellers, Victor Jewellers and Bharat Ratna Jewellers are also engaged in handmade jewellery production, but there is no movement of workers from one to the other sector. Raghav Jewellers, Chandra Jewellers and Bharat Ratna Jewellers resorted to some measures of functional flexibility within the machinemade

jewellery sector. However, the functional flexibility here did not lead to any crossing of the boundaries of the gender division of labour. The functional flexibility of the workers does not imply the capacity to cater to changes in demand but it does mean that the functionally flexible workers can perform more than one task in the event of other workers being terminated. So the inverse relationship between functional and numerical flexibility noted by Walby (1989) is substantiated in the case of some workers. However men are not functionally more flexible than women.

Male workers engaged in mastermaking and women workers in quality control have some control over their work task. However, other workers have little control over their work task. The companies determine the work task of the workers and maintain records of the overall outputs. Some companies resort to closer controls and maintain individual records in the wax casting and wax setting sections, which are feminised, and in the stone studding section, which is masculinised.

In the context of the debates on flexibility and the gendered labour process, there is a slight feminisation of financial and numerical flexibility. However in no case does flexibilisation lead to women substituting for men or reduce the gender division of labour, and Elson's (1996) assertion that flexibility does not override the gender division of labour is thus supported.

From my micro level analysis of the relationship of flexibility and the gendered labour process in the context of the three sites and two forms of jewellery production, it is

difficult to assert the position of Standing (1989), Elson (1996), or Banerjee (1996) uniformly. While Elson's (1996) assertion that the gender division of labour is not overridden by flexibility is broadly true, the argument is complicated in my case study of handmade jewellery production, where women are totally absent from the production process in NEPZ and are outside *monetised* production as unpaid family workers in Delhi and Medinipur (as chain solderers). Flexible labour market conditions prevail in all the three sites of handmade jewellery production but are accompanied by a majority but invisible presence of women in the villages, their complete absence in NEPZ and their marginal presence in Delhi. Elson's (1996) assertion that the gender division of labour structures the nature of flexibility can be seen in the villages, in the context of a broad gender division of labour where women are constructed as housewives and men as breadwinners. This constrains the numerical flexibility available to women homeworkers in Medinipur or even in Delhi, as compared to male contractors or artisan/subcontractors. The construction of women as housewives and the control over their (hetero) sexuality excludes women from the visible spaces of the workshops of handmade jewellery and prevents them from acquiring transferable skills and from migrating independently. This helps the entrepreneurs and contractors in NEPZ and Delhi to organise production in such a way that all male artisans work and cohabit the same space, and are available to work for flexible hours not just in the day but also at night.

In machinemade jewellery production a full capitalist system of production prevails, so that labour market flexibility is in the context of casualisation of the labour force. Here there is slight feminisation of flexible labour, in terms of there being a greater proportion

of women with a casual and temporary status as compared to their overall representation. However, in no case is there a substitution of women for men or a decline in the gender division of labour with flexibilisation, so Elson's (1996) assertion of the gender division of labour structuring the nature of flexibility is substantiated here.

Flexible conditions of work, coexisting with a masculinised labour force in handmade jewellery production in NEPZ and Delhi, reassert Banerjee's (1996) position claiming little or no link between feminisation and flexibility.

Standing's (1989) assertion of flexibilisation leading to women substituting for men is supported in a limited way in the familial context, with four women crossing the boundaries of the gender division of labour to do soldering in the villages and in the case of a woman doing jewellery work in Delhi. All these cases are of women as unpaid family workers, who give additional flexibility to their husbands in their role as contractors or artisan/subcontractors.

7.4 SCOPE FOR FUTURE RESEARCH

My study shows that the gender division of labour is not a fixed or given entity but a product of discursive and material practices, which are reproduced through discourses into which different actors invest, and which feed into the gendered identities of these actors. The research breaks down the assumption of a formal labour market and a preponderance of women in EPZs. It has complicated the debates on feminisation and

flexibility, which are still unresolved, underlining the importance of localised industry studies which are not bounded in a particular space.

In the context of my analysis of the gendered processes of jewellery production, I have analysed how practices, discourses and subjectivities are mutually constitutive, and the manner in which they reproduce certain power structures, which are gendered. For my future research I will extend this framework to analyse the effect of power on localised sites of resistances by women in different forms of jewellery production. In this context I will look at both overt and covert forms of resistance of women that open up new spaces of gender contestations and the potential for social action and transformation.

In resisting oppressions of different forms, women enact their multiple subjective identities as women, as workers and sometimes as persons responsible for budgeting household expenditure. I will use the multiple voices of women, as subjects of oppression and as agents resisting these forces of oppression, to analyse both households and workplace as potential sites of conflict.

Appendix I

Questionnaire for the Employers in NEPZ and Delhi

Section A

1. Name of the enterprise

2. Person(s) to be contacted for clarification/additional information

3. What are the main products exported by your unit?

a.)	b.)
c.)	d.)

4. How would you classify the form of ownership of your enterprise?

(Please tick the appropriate box)

a.) Sole Proprietorship	
b.) Partnership	
c.) Private Limited	
d.) Public Ltd	
e.) Other(please state)	

5. Please indicate the sector under which your unit can be classified.

(Please tick the appropriate box)

a.) Public Sector Undertaking	
b.) Co-operative Undertaking	
c.) Joint Sector Undertaking	
d.) Private Sector Undertaking	
e.) Multinational Corporation	
f.) Other (please state)	

6.i.) Please indicate which of the following would classify the ownership of your company. (Please tick the appropriate box)

a.) Resident Indian Owned	
b.) Non Resident Indian Unit	
c.) Partly Indian and Partly Foreign	
d.) Foreign Owned	
e.) Any other(specify)	

6 ii.) If your enterprise is partly Indian and partly foreign owned please indicate the percentage share of the foreign equity (Please tick the appropriate box)

Percentage Share of the foreign equity	
a.) 1-20	
b.) 21-40	
c.) 41-50	
d.) 51-70	
e.) 71-90	
f.) 91-100	

Section B

1. Please indicate the date of incorporation of the company in the Noida Export Processing Zone (Please tick the appropriate box)

1985 □ 1986 □ 1987 □ 1988 □ 1989 □ 1990 □

1991 □ 1992 □ 1993 □ 1994. □.1995 □ 1996 □

2 i.) Do you contract out work?

Yes □ No □

ii.) If **Yes** what is the value of the work contracted out as a proportion of the turnover of your unit? (Please tick the appropriate box)

a. Less than 10%	
b. Between 10%-25%	
c. Between 26%-40%	
d. More than 40%	

Section C

1 Please indicate the total number of production workers and total number of employees in each of the categories below as on the last day of the financial year **1996.**

Category/Status	Permanent		Temporary		Casual	
	Male	Female	Male	Female	Male	Female
Total number of production workers						
Total number of Employees						

2. Please indicate the total number of production workers and total number of employees in each of the categories below as on the last day of the financial year **1991.**

Category/Status	Permanent		Temporary		Casual	
	Male	Female	Male	Female	Male	Female
Total number of production workers						
Total number of Employees						

3 i.) Do you get any work related to this establishment done through contract labour or through contracting out jobs on the premises or outside premises?

Yes ☐ No ☐

ii.) If **yes** how many workers were so employed?

a.) Within Premises

Year	Males	Females	Total
1990-91			
1995-96			

b.) Outside Premises

Year	Males	Females	Total
1990-91			
1995-96			

c.) As Homeworkers

	Males	Females	Total
1990-91			
1995-96			

4. What are the main reason for contracting out some activities in your enterprise? (Please tick the three most important reasons)

a.) Lower supervision cost	
b.) Lower wage and non wage costs	
c.) Uncertain and fluctuating demand	
d.) Specialisation	
e.) Labour laws	
f.) Technological reasons	
g.) Any Other (please specify)	

5. Recruitment Policy: What are the method/methods of recruitment of production workers in your organisation? (Please tick the appropriate box)

a.) Employment Exchange	
b.) Advertisement	
c.) Informal Contacts	
d.) Other (please specify)	

6. Could you please briefly describe the kinds of work done by male and female production workers in your unit?

Production Workers	Males	Females
a.) Skilled		
b.) Semi-Skilled		
c.) Unskilled		

7. Please indicate the number of **production workers by age** in your unit.

Age Category	Males	Females
a.) Less than 18		
b.)18-30		
c.) 31-44		
d.) 45 and above		

8. Please indicate the number **of production workers by marital status** in your unit.

8. Please indicate the number **of production workers by marital status** in your unit.

Marital Status	Men	Women
a.) Unmarried		
b.) Married		
c.)Widowed/Separated/Divorced		

9. Please indicate the **educational level of production workers** in your unit.

	Illiterate		Up to Primary School		Between Primary and Intermediate		Graduate and above	
	Male	Female	Male	Female	Male	Female	Male	Female
a.) Supervisor								
b.) Skilled								
c.) Semi-Skilled								
d.) Unskilled								

10.(i) Do all the production workers in your region come from the vicinity of Noida?

a.) Male Workers Yes □ No □

b.) Female Workers Yes □ No □

(ii) If there are some migrant production workers in your organisation please indicate the approximate proportion of the same (Tick mark the appropriate box for male and female employees).

	Males	Females
Less than 10%		
10%-25%		
25%-50%		
More than 50%		

11. If the production workers also comprise of migrants from other regions please indicate the region/regions from which they have migrated .

a.) Male Workers	
b.) Female Workers	

12. What is the system of wage payment for production workers in your enterprise?

(Please tick the appropriate box)

a.) Time rated	
b.) Piece rated	
c.) Both time and piece rated	

13. Are employee welfare schemes operational in your unit?

Yes □ No □

14. What is the average level of absenteeism among production workers in your unit?

(Please tick the appropriate box for male and female workers

Absentee Rate (in percentage)	Male	Female
0-10		
11-25		
26-40		
41-50		
51-70		
> than 70		

15. What is the average level of turnover of production workers in your unit?

(Please tick the appropriate box for male and female workers)

Turnover Rate (in percentage)	Male	Female
0-10		
11-25		
26-40		
41-50		
51-70		
> than 70		

16. Comparative performance of male and female production workers in different categories (wherever comparisons can be made).

Please tick the appropriate boxes for each category of worker.

Category/Status	Women more productive than men	Women less productive than men	Women equally productive as men
a.) Supervisor			
b.) Skilled Workers			
d.) Semi-skilled Workers			
e.) Unskilled Workers			

17. i.) Do the production workers in your organisation undergo training either at the time of recruitment or later?

Yes ☐ No ☐

ii.) If **yes**, please indicate the training provided to different categories of production workers in 1995-96

Occupation in which Training is imparted	Number of workers who received training		Period of training
	Men	Women	
Production Workers			
a.) Supervisor/Foremen			
b.) Skilled worker			
c.) Semi-skilled worker			
d.) Unskilled worker			

18 i.) Do you have any promotion schemes for production workers in your organisation?

Yes ☐ No ☐

ii.) If yes please indicate the number of production workers in different categories promoted in 1995-96.

Category of worker promoted	Male	Female	Criteria for promotion
Supervisor			
Skilled			
Semi -Skilled			
Unskilled			

Appendix II Table A.1 Work and Demographic Profile of the Workers in Machinemade Jewellery Production in NEPZ

Part 1 Dimple Jewellers

Name of the Worker (pseudonym)	Sex	Age	Highest Educational Status	Marital Status	Number and Age of Children	State of Birth	Years since Migration to Delhi/ Noida if Applicable	Nature of the Work done in the Company	Years of Work experience in the Company	Method of Recruitment	Period of Training	Salary (Rs per month)	Other benefits
Preeti	F	28	Year 6	M	2 (14,12)	Bihar	5	Quality Control	3 years 6 months	Informal	None	1450	None
Purnima Jha	F	26	Year 2	M	3 (10,6,4)	Bihar	2	Wax	3 years 7 months	Informal	Six months	1325	None
Amita	F	30	Year 8	M	3 (12, 10, 7)	Garhwal / (Uttar Pradesh)	3	Wax	2 years	Informal	10-15 days	1325	None
Alka Tripathi	F	27	Year 6	M	3 (5, 8, 10)	Village Panthra (Uttar Pradesh)	6	Wax	2 years	Informal	1-2 days	1350	None
Neeru Drivedi	F	20	Year 12	U	0	Village Jahanabad (Uttar Pradesh)	2 months	Wax	1 month	Informal	Still ongoing	1100	None
Jyoti	F	20	Year 9	M	1 (1)	Vardhman district, (West Bengal)	3 years	Wax	2 years 6 months	Informal	20-25 days	1358	None
Lalit	M	35	Year 4	M	4 (16, 14, 12, 6)	Hawrah district, (West Bengal)	25 years	Master Maker	5 years	Informal	None	3000	PF, ESI, EL
Manav Joshi	M	23	Year 11	U	0	Pampoli village, Almorah , (Uttar Pradesh)	3 years and 6 months	Plating	2 years 8 months	Informal	Still on going	1512	ESI, CB

Part 2 Raghav Jewellers

Name of the Worker (pseudonym)	Sex	Age	Highest Educational Status	Marital Status	Number and Age of Children	State of Birth	Years since Migration to Delhi /Noida if applicable	Nature of the Work done in the Company	Years of Work Experience in the Company	Method of Recruitment	Period of Training	Salary (Rs per month)	Other Benefits
Sulekha Burao	F	24	Year 12	M	1 (2 years)	Calcutta, (West Bengal)	8 years	Quality control, Distribution	9 months	Informal	1month 15 days	1600	CB
Ayesha Bajaj	F	18	Year 10	U	0	Uttar Pradesh	NA	Wax	6 months	Informal	2 months	1200	CB
Gayatri Devi Shrivastava	F	24	Year 8	S	2 (9, 7)	Uttar Pradesh	5 years	Wax	2 years	Informal	2 months	1600	CB
Kavita Mehrauli	F	18	Year 9	U	0	Uttar Pradesh	NA	Wax	6 months	Informal	1 month	1200	CB
Madhu	F	21	Year 9	U	0	Calcutta (West Bengal)	3 years	Wax	3 months	Informal	2 years	1500	CB
Alok	M	26	Year 5	U	0	Village Paripara, (West Bengal)	5 years	Diamond Setter	6 months	Informal	1 year	4200	CB

Part 3 Victor Jewellers

Name of the Worker (pseudonym)	Sex	Age	Highest Educational Status	Marital Status	Number and Age of Children	State of Birth	Years since Migration to Delhi /Noida if Applicable	Nature of the Work done in the Company	Years of Work Experience in the Company	Method of Recruitment	Period of Training	Salary (Rs per month)	Other Benefits
Mansi Sharma	F	18	Year 12	U	0	Punjab	6 years	Packing Inspection	1 year 2 months	Informal	6 months	1500	Part Company bus
Sulekha Shukla	F	20	Year 8	M	0	Madhya Pradesh	1 year	Wax	9 months	Informal	3 months	1342	Part Company bus
Swarna Ghosh	F	22	Year 10	M	0	West Bengal	NA	Quality control	6 years	Formal	3 months	2100	PF, ESI CB
Tapas Mandal	M	24	Year 5	U	0	Hogly (West Bengal)	12 years	Master maker	4 years	Formal	2 months	4500	PF, CB
Kamal Singh	M	26	Year 10	M	0	Madhya Pradesh	8 years	Master maker, Filing	1 year, 6 months	Formal	1 year	1400	PF, ESI, CB

Part 4 Pratap Diamond Jewellers

Name of the Worker (pseudonym)	Sex	Age	Highest Educational Status	Marital Status	Number and Age of Children	State of Birth	Years since Migration to Delhi /Noida if Applicable	Nature of the Work done in the Company	Years of Work Experience in the Company	Method of Recruitment	Period of Training	Salary (Rs per month)	Other Benefits
Gayatri Singh	F	18	Year 10	U	0	Bihar	13 months	Wax	1 year	Formal	3 months	1200	PF, ESI, EL, CB
Meena Manna	F	21	Year 10	M	0	Hawrah district (West Bengal)	1 year	Wax Stone Setting	2 months[i]	Informal	2 months	1100	None
Sunyana Mandal	F	20	Year 10	M	0	Calcutta (West Bengal)	1 year	Wax Stone setting	1 year	Formal	15 days	1200	PF, ESI, EL
Savita Malaker	F	26	Year 12	M	3 (6 years,3 years, 7 months)	Madhya Pradesh	6 years	Wax	6 years	Formal	2 months in the first company	2800	PF, ESI, EL
Meeta	F	25	BA	M	1 (2 years)	Uttar Pradesh	5 years	Wax setting supervisor	5 years	Formal	3 months	3500	PF, ESI EL
Pradeep Nayak	M	33	Year 8	M	0	Calcutta, (West Bengal)	8 years	Filing, Master making	1 year 8 months	Informal	Trained in the work shop	2500	PF, ESI EL

Part 5 Chandra Jewellers

Name of the Worker (pseudonym)	Sex	Age	Highest Educational Status	Marital Status	Number and Age of Childrn	State of Birth	Years since Migration to Delhi /Noida if Applicable	Nature of the Work done in the Company	Years of Work Experience in the Company	Method of Recruitment	Period of Training	Salary (Rs per month)	Other Benefits
Mrinalini Naidu	F	21	Doing graduation	U	0	TamilNadu	NA	Metal setting, Wax setting, quality control	1 year 8 months	Formal	6 months in metal setting	1800	PF, ESI, CB
Roopa Kanodia	F	23	Year 10	M	0	Uttar Pradesh	NA	Wax department Supervisor	2 years 6 months	Informal	3-4 days	3200	PF, EL, CB
Amrita Verma	F	26	Year 11	M	0	Uttar Pradesh	4 years	Wax	10 months	Formal	6 days	1900	PF, ESI, EL,
Ajit Kumar Manna	M	28	Graduation	M	0	West Bengal	6 years	Filing	1 year 9 months	Formal	6 months	1900	PF, ESI, EL
Adhir Roy	M	20	BA part one	U	0	West Bengal	NA	Filing	1 year 6 months	Formal	Learnt in Fathers work shop	2000	PF, ESI, EL

Part 6 Bharat Ratna Jewellers

Name of the Worker (pseudonym)	Sex	Age	Highest Educational Status	Marital Status	Number and Age of Children	State of Birth	Years since Migration to Delhi /Noida if Applicable	Nature of the Work done in the Company	Years of Work Experience in the Company	Method of Recruitment	Period of Training	Salary (Rs per month)	Other Benefits
Mrinalini	F	26	A Levels	M	0	Nepal	NA	Mould cutting and Wax department Supervisor	3 years	Formal	15 days	7000	PF, EL
Shyama	F	25	Masters	U	0	Varanasi, (Uttar Pradesh)	3 years	Diamond Setting Supervisor	1 year 6 months	Formal	None	6000	PF, EL
Lakshmi Ganesh	F	24	Graduation	M	1 (8 months)	TamilNadu	4 years	Metal Allocation	3 years	Formal	3 months	4000	PF, EL
Savita Gupta	F	26	Graduation	U	0	Uttar Pradesh	NA	Quality control and checking	2 years	Formal	2 weeks for plating	6000	PF, EL
Rohini Ghosh	F	21	Year 6	U	0	Bengal	4 years	Wax	2 years	Formal	4 months	3600	PF, EL CB
Asit	M	21	Year 10	U	0	Himachal Pradesh	1 year	Still learning Casting	6 months	Formal	Still learning	2000	PF, EL ESI
Hari	M	25	Graduation	U	0	Uttar Pradesh	3 years	Polishing and plating	2 years 6 month	Formal	3 weeks	4700	PF, EL CB

Source: Based on the interviews carried in NEPZ between May 1996 and January 1997

Index:
Sex: F = female, M = male
Marital Status: M = married U = unmarried S =Separated
PF = Provident Fund
ESI = Employee State Insurance
EL = Earned leave
CB= Company Bus

Part Company bus =When company bus is used for some part of the distance to and from work

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[i] Meena Manna had been retrenched at the time of the interview. She being trained for three months initially, but was retrenched after two months.

Appendix III Table A.2 Work and Demographic Profile of Different Actors in Handmade Jewellery Production in NEPZ and Delhi

Name	Age	Highest Educational Status	Marital Status	Number and Ages of Children	Years since Migration	Age at Migration	Years Spent as Trainee in the Village	Years Spent as Trainee in Calcutta/Delhi/ NEPZ	Payment (Rs/gm of processed gold)	Net Margin/Wages per month (This is over and above food in case of adult artisans)[i]
ML Jewellers, NEPZ										
Artisan Trilok	30	Year 6	M	2 (4,3)	12	18	Nil	4 years in Calcutta	RS 10-12/gm	Rs.4000-5000
Artisan Dipin	25	Year 5	U	None	8	17	1	1 1/2 years in NEPZ	Rs.10-12/gm	Rs.3000-4000
Adhir	23	Year 4	U	None	6	17	2 1/2	Nil	RS 10-14/gm	RS 2000-3000
Artisan Sudhir	26	Year 4	M	1 (5)	15	11	Nil	2 years	RS. 10-14/gm	Rs.2000-2500
Employee Prakash	22	Year 4	U	None	5	17	Nil	11/2 in NEPZ	fixed	Rs.3000
Employee Vidur	33	Year 8	M	2 (6,3)	11	22	Nil	1 1/2 years in Calcutta	fixed	Rs. 2500
Sudhim Jewellers, NEPZ										
Artisan Chaman	27	Year 10	M	None	8	19	1 year	Nil	Rs 17/gm	Rs.7000-8000
Artisan Prashant	22	Year 8	U	None	5	17	Nil	1 1/2 years in Delhi	Rs.9/gm	Rs 2000-2500
Artisan Banmali	24	Year 10	U	None	3	21	Nil	8 months	Rs 9/gm	Rs 2000-2500
Artisan Goverdhan (Polisher)	21	Year 10	U	None	3	18	Nil	6 months	3.5 gm gold on 1 kg	Rs. 3000-3500
Bharat Exports NEPZ										
Contractor Sandeep	26	Year 7	U	None	9	17	Nil	3 1/2 years in Delhi	Rs.15/gm	Rs 2000-Rs 3000
Contractor Abhishek	24	Year 4	U	None	7	17	Nil	2 years in Delhi	Rs.15/gm	Rs. 2800-Rs 3000

Name	Age	Highest Educational Status	Marital Status	Number and Ages of Children	Years since Migration	Age at Migration	Years spent as Trainee in the Village	Years spent as Trainee in Calcutta/Delhi/ NEPZ	Payment (Rs/gm of processed gold)	Net Margin/Wages per month (This is over and above food in case of adult artisans)
Artisan Ravi (cutter)	27	Year 2	M	1 (7)	12	15	2 years	3 years	3 gm on 1 kg	Rs 2500-3000
Employee Suman	22	Year 8	U	None	2	20	6 months	1 year in Delhi	fixed	Rs 1800
Sameer Jewellers, Nutan Jewellers NEPZ										
Contractor Giri	23	Year 6	U	None	9	14	2 and 1/2	Nil	Rs 14/gm	Rs 2000-Rs 5000
Employee Nimi	21	Year 7	U	None	4	17	2	2 years in Delhi	fixed	Rs 1000
Employee Shakti	20	Year 5	U	None	3	17	Nil	2 years in NEPZ	fixed	Rs. 1500
Employee Tanvir	25	Year 5	U	None	4	21	2		fixed	Rs 2000
Artisan Deepak	23	Year 2	U	None	9	14	2	1 year in Delhi	RS 6/gm	Rs 1800-2200
Naveen Jewellers, Delhi										
Contractor Tapas	31	Year 9	M	None	9	22	Nil	2 years in Delhi	Rs 14/gm	Rs 2000-5000
Employee Dhireendra	24	Year 6	U	None	6	18	Nil	2 years in Delhi	fixed	Rs 2000
Employee Sameer	24	Year 8	U	None	5	19	Nil	1 year in Calcutta	fixed	Rs 2500
Employee Mandeep	22	Year 6	U	None	4	18	1	1 and a half years in Delhi	fixed	RS 1500
Employee Drupad	24	A level	U	None	9	15	Nil	1 year in Delhi	fixed	RS. 1500
Artisan Kirti	23	Year 5	U	None	7	16	1	2 years in Delhi	Rs 8/gm	Rs.2000-2500
Artisan Sharukh (Polisher)	24	Year 6	U	None	6	18	Nil	2 years in Delhi	4 gm. on 1 kg	Rs 3500-4000
Young Worker Tapas Bera (working for Dhirendra)	16	Year 4	U	None	1 year 6 months	14 and half	Nil	1 year 6 month in Delhi	Subsistence	Food, clothing etc
Young Worker Gopal (working for Drupad)	17	Year 4	U	None	2	15	1	2 years in Delhi	Subsistence	Food, clothing etc

Name	Age	Education	Marital Status	Number and Ages of Children	Years since Migration	Age at Migration	Years Spent as Trainee in the Village	Years spent as Trainee in Calcutta/Delhi/ NEPZ	Payment (Rs/gm of processed gold)	Net Margin/Wages per month) (This is over and above food in case of artisans
Young Worker Asim (working for Kirti)	18	Year 6	U	None	2	16	2	2 years in Delhi	Subsistence	Food, clothing etc
Young Worker Deepak Jana (working for Sameer)	18	Year 8	U	None	1	17	None	1 year in Delhi	Subsistence	Food, clothing etc
Bharat Jewellers, Sharma Jewellers, Delhi										
Contractor Sudesh	34	Year 10	M	2 (8, 4)	16	18	Nil	6 months in Delhi	Rs 22/gm	Rs.10000-15000
Artisan Mandeep	26	A level	M	None	4	22	1 year	4 months in Delhi	Rs. 7.50/gm	Rs 3000-4000
Artisan Salil	22	None	U	None	10	12	Nil	1 year in Calcutta	Rs 7.50/gm	Rs 2000 - 2500
Employee Sanat Bera	19	Year 3	U	None	3	16	Nil	2 years in Calcutta	fixed	Rs 1400
Employee Karim	22	Year 6	U	None	12	10	Nil	1 and 1/2 years in NEPZ	fixed	Rs 1500
Employee Shambhu	22	Year 7	U	None	5	17	1	2 years in Calcutta and Delhi	fixed	RS 2000
Child Worker Debu (Working for Sanat Bera)	13	Year 3	U	None	6 months	12 and half	1	6 months	Subsistence	Food , clothing etc
Young Worker Saumant (Working for Shambhu)	18	Year 7	U	None	1 year 6 months	16 and half	None	1 year 6 months in Delhi	Subsistence	Food , clothing etc
Young Worker Babloo Bengal (Working for Mandeep)	16	Year 4	U	None	6 months	14 and half	1	6 months in Delhi	Subsistence	Food , clothing etc

[i] The cost of food is calculated as Rs 500 per month, which is deducted at source for both the employees and artisans. The wages here were net of deduction for food in the case of employees and net of deductions of food and the subsistence expenditure of the child/young workers in case of artisan working on per gram basis.

Source: Based on the interviews with the contractors, artisans and child/young workers in NEPZ and Delhi in the course of my field work, May 1996-January 1997

Appendix IV

Table A.3 Work and Demographic Profile of Different Actors in the Villages of Medinipur

Name	Sex	Age	Highest Education Status	Marital Status	Number and Age of Children	Nature of Work	Period and Space of training	Type of Unpaid assistance	Daily Hours of Work	Payment Made[1]	Wage/ Monthly Margin
Village Panna[2]											
Nikhilesh (Contractor)	M	40	A levels	M	2 (15, 10)	Supervision	2 years in a workshop	Assisted by brother	8 hours	Rs 500 per kg	Rs 2000-3000
Samesh (Contractor)	M	40	Year 4	M	3 (20, 18, 16)	Supervision, soldering and finishing	3 years in a workshop	None	7-8 hours	Rs 300 for a kg	Rs 1000
Dhiraj (artisan/sub contractor)	M	37	Year 6	M	4 (8,6, 3, 1)	Soldering and finishing of chains	2 years in a workshop	Assisted by wife	12 hours	Rs 3.50 for a chain	Rs 800 - 1200
Kavita (wife of Dhiraj, unpaid family worker)	F	33	Year 5	M	4 (8. 6. 3. 1)	Soldering and finishing of chains	1 year at home	None	5-6 hours	Unpaid family worker	
Suresh (artisan/sub contractor)	M	45	Year 5	M	4 (20, 14, 12, 10)	Soldering and finishing	8 months in a workshop	Assisted by two sons	7 hours	Rs 3-4 for a chain	Rs 1000 - 1200
Prakash (artisan/sub contractor)	M	26	None	M	4 (20, 14, 12, 10)	Soldering and finishing	2 years in a workshop	None	7 hours	Rs 3 for a chain	Rs 700-800
Sunil (artisan/sub contractor)	M	37 years	Year 4	M	2 (6, , 1)	Soldering and finishing	1 year in a workshop	None	9 hours	Rs 3.50 per chain	Rs 700-800
Parvati (homeworker)	F	27	Year 7	M	2 (8, 5)	Chain weaving	2 months at home	None	3 hours	50 paisa a chain	Rs 60-90
Urmila (homeworker)	F	23	Year 6	M	2 (5, 6)	Chain weaving	3 months at home	None	2-4 hours	50 paisa a chain	Rs 100-150
Reena (homeworker)	F	35	Year 2	M	3 (20. 18, 16)	Chain weaving	2 days	None	2-3 Hours	50 paisa a chain	Rs 100-150
Taruna (homeworker)	F	17	Year 2	U	None	Chain weaving	2 months at home	None	2-2 and 1/2 hours	50 paisa a chain	Rs 150

Name	Sex	Age	Highest Education Status	Marital Status	Number and Age of Children	Nature of Work	Period and Space of Training	Type of Unpaid Assistance	Daily hours of Work	Payment Made	Wage/ Monthly Margin
Puja (homeworker)	F	24	None	S	1 (8)	Chain weaving	3 months at home	None	5-7 hours	50 paisa a chain	Rs 150-210
Mridula (homeworker)	F	15	Year 4	U	None	Chain weaving	1 month at home	None	2 and 1/2 hours	50 paisa a chain	Rs 150
Drishti (homeworker)	F	50	None	M	4 (26, 24, 17, 14)	Chain weaving	10 days at home	None	2 hours	50 paisa a chain	Rs 60
Damini (homeworker)	F	28	Year 2	M	5 (10, 8, 6, 5, 4)	Chain weaving	5-6 days at home	None	4 hours	50 paisa a chain	Rs 150-180
Village Mehmoodpur											
Anand (artisan/sub contractor)	M	36	Year 2	M	2 (12, 8)	Soldering and finishing	1 year 6 month in a workshop s	Assisted by wife	14 hours	Rs 3.50 a chain	Rs 1000-1500
Alka (wife of Anand, unpaid family worker)	F	29	Year 2	M	2 (12, 8)	Soldering and finishing	3 months at home	None	12 hours	Unpaid family worker	-
Kamal (homeworker)	F	32	Year 3	M	2 (15, 10)	Chain weaving	10 months at home	None	2-3 hours	50 paisa a chain	Rs 100-150
Village Sagar											
Devendra (Contractor)	M	32	A levels	M	1 (4)	Supervision, soldering finishing	5 years in a workshop	Assisted by wife	8 hours	Rs 300 per kg	Rs 1100
Bimla (wife of Devendra, unpaid family worker)	F	26	Year 6	M	1 (4)	Chain soldering and finishing	2 years at home	None	2-3 hours	Unpaid family worker	-
Pranita (homeworker)	F	27	Year 5	M	2 (8,6)	Chain weaving	10 days at home	None	7-8	50 paisa a chain	Rs 250-300

Source: Based on the interviews with male contractors, artisans/subcontractors, women homeworkers and unpaid family workers in the course of my fieldwork in Medinipur in November-December 1996

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[1] The estimate is excluding the fifty paisa per chain paid to the women chain weavers by some subcontractors.

[2] The Table does not include the details of two male migrants interviewed in Panna.

Appendix V

Table A.2 Payment Structure of Women Engaged in Chain Weaving in Medinipur

Name	Daily hours of work (1)	Average number of days worked in a month (2)	Payment made (3)	Wages per month (4)	Average wage per month (5)	Average Wage per hour (6)= (5)/ [(1)x (3)]
Parvati (homeworker)	3 hours	30	50 paisa a chain	Rs 60-90	Rs 75	0.83
Urmila (homeworker)	2-4 hours	30	50 paisa a chain	Rs 100-150	Rs 125	1.39
Reena (homeworker)	2-3 Hours	30	50 paisa a chain	Rs 100-150	Rs 125	1.67
Taruna (homeworker)	2-2 and 1/2 hours	30	50 paisa a chain	Rs 150	Rs 150	2.22
Puja (homeworker)	5-7 hours	30	50 paisa a chain	Rs 150-210	Rs 180	1
Mridula (homeworker)	2 and 1/2 hours	30	50 paisa a chain	Rs 150	Rs 150	2
Drishti (homeworker)	2 hours	30	50 paisa a chain	Rs 60	Rs 60	1
Damini (homeworker)	4 hours	30	50 paisa a chain	Rs 150-180	Rs 165	1.37
Kamal (homeworker)	2-3 hours	30	50 paisa a chain	Rs 100-150	Rs 125	1.67
Pranita (homeworker)	7-8	30	50 paisa a chain	Rs 250-300	Rs 275	1.22
Overall Average	3.52	30	50 paisa a chain	Rs 143	Rs 143	1.35

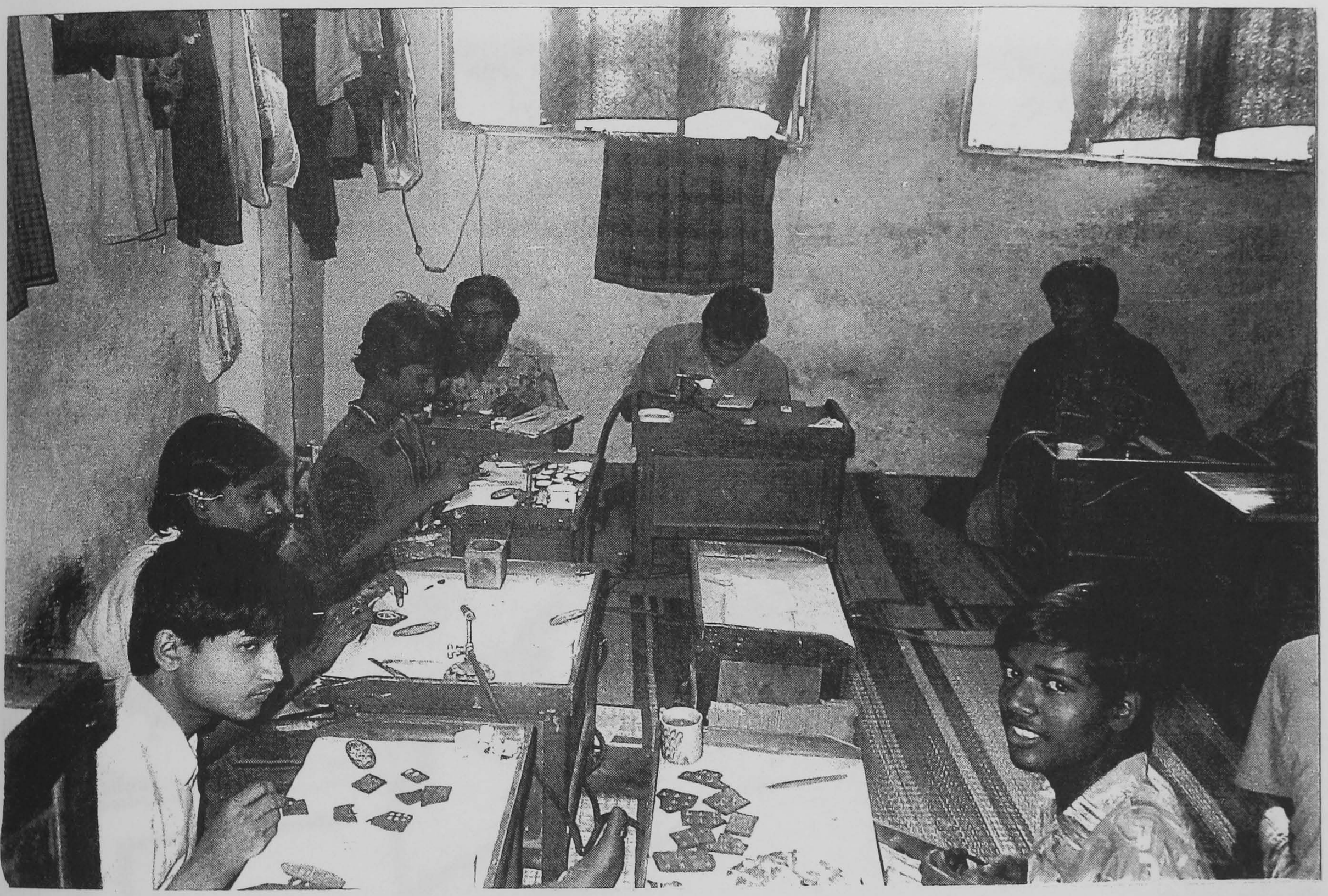
Source: Based on the interviews with women homeworkers and unpaid family workers in the course of my fieldwork in Medinipur in November-December 1996

Appendix VI **Photographs of Jewellery Production**

Picture 4.1 Master Makers in Bharat Ratna Jewellers

Picture 4.2 Wax Department in Bharat Ratna Jewellers

Picture 4.3 Nikhilesh's Handmade Jewellery Workshop in Raigerpura, Delhi



Picture 4.4 A Woman Engaged in Chain Weaving at her Home in Village Panna, Medinipur

Bibliography

Afshar, Haleh and Bina Agarwal (1989) (eds.) *Women, Poverty and Ideology in Asia, Contradictory Pressures, Uneasy Resolutions*, Macmillan, Houndsmill, Basingstoke.

Agarwal, Bina (1989) Women, Land and Ideology in India, in Haleh Afshar and Bina Agarwal (eds.) *Women, Poverty and Ideology in Asia, Contradictory Pressures, Uneasy Resolutions*, Macmillan, Houndsmill, Basingstoke, pp 70-98.

Allen, Sheila and Carol Wolkowitz (1987) *Homeworking, Myths and Realities,* Women in Society, A Feminist List, Macmillan, edited by Jo Campling, London.

Amin, Ash (1989) 'Specialization without growth: small footwear firms in Naples' *in* E Goodman and J Bamford (eds.) *Small Firms and Industrial Districts in Italy, Routledge* and Kegan Paul, London, pp. 239-269.

Andermahr, Sonya, Terry Lovell and Carol Wolkowitz (1997) *A Concise Glossary of Feminist Theory,* Arnold, London.

Atkinson, John and Nigel Meager (1986) *New Forms of Work Organisation*, IMS Report No.121, Institute of Manpower Sudies.

Bakker, Isabella (1994) (ed.) *The Strategic Silence, Gender and Economic Policy*, North-South Institute, Zed Books, London.

Banerjee, Nirmala (1983) *Role of Women Workers in Export Oriented Industries, Five Case Studies of West Bengal*, ICSSR, New Delhi.

Banerjee, Nirmala (1991) 'The More It Changes The More It Is The Same - Women Workers In Export Oriented Industries' in Nirmala Banerjee (ed.) *Indian Women in a Changing Industrial Scenario,* Sage Publishers, New Delhi, London, pp.237-298.

Banerjee, Nirmala (1996) 'Technological Change and the Feminization of Work', Paper presented in the National Seminar on Gender and Employment in India: Trends, Patterns and Policy Options, Organised by Indian Society of Labour Economics and the Institute of Economic Growth (18-20 December).

Bartky, Sandra Lee (1990) *Femininity and Domination: Studies in the Phenomenology of Oppression*, Routledge, London.

Beneria, Lourdes (1992) 'The Mexican Debt Crisis: Restructuring the Economy and the Household' in Lourdes Beneria and Shelley Feldman (eds.) *Unequal Burden: Economic Crisis, Persistent Poverty and Women's Work*, Westview Press, Boulder, Oxford, pp.83-104.

Boserup, Ester (1970) *Women's Role in Economic Development*, Allen and Unwin, London.

Boserup, Ester (1990) 'Economic changes and the role of women' in Irene Tinker (ed.) *Persistent Inequalities: Women and World Development*, Oxford University Press, New York, pp. 14-24.

Bradley, Harriet (1986) Technological Change, Management Strategies and the Development of Gender-based Job Segregation in the Labour Process, David Knights and Hugh Willmott (eds.) *Gender and the Labour Process*, Gower Publishing Company Ltd., Hampshire, pp 54-73.

Braverman, Harry (1974) *Labour and Monopoly Capital, The Degradation of Work in the Twentieth Century*, Monthly Review Press, New York.

Brodie, Janine (1994) 'Shifting the boundaries: Gender and the Politics of Restructuring' In Isabella Bakker (ed.) *The Strategic Silence, Gender and Economic Policy,* Zed Books, London, pp. 46-60.

Cagatey, Nilufer and Gunseli Berik (1990), 'Transition to Export Led Growth in Turkey: Is there a Feminization of Employment?' *Review of Radical Political Economics*, 22 (1), pp. 115-134.

Cagatey, Nilufer and Sule Ozler (1995) Feminization of the Labour Force: The Effects of Long Term Development and Structural Adjustment, *World Development*, 23(11), pp. 1883-1894.

Canning, Kathleen (1994) 'Feminist History after the Linguistic Turn: Historicizing Discourse and Experience', *Signs,* 19 (2), pp 368-404.

Chapkis, Wendy and Cynthia Enloe (1983) (eds.) *Of Common Cloth: Women in the Global Textile Industry*, Transnational Institute, Amsterdam.

Cheng, Cliff (1996) (ed.) *Masculinities in Organizations*, Sage Publications, London.

Chhachhi, Amrita, Nandita Gandhi, Sujata Gothosker and Nandita Shah (1996) 'Revisiting Flexibility, Casualisation and Feminisation Implications for Women Worker's Lives', Paper presented in the National Seminar on Gender and Employment in India: Trends, Patterns and Policy Options, Organised by Indian Society of Labour Economics and the Institute of Economic Growth (18-20 December).

Chhachhi Amrita and Ranee Pittin (1996) 'Introduction' in Amrita Chhachhi and Ranee Pittin (eds.) *Confronting State Capital and Patriarchy*, Macmillan Press Ltd., Basingstoke, London, pp.1-32.

Cho, Hae- Joang (1989) 'Internal Colonisation and the Fate of Female Divers in Cheju Island, South Korea' in Haleh Afshar, and Bina Agarwal (eds.) *Women, Poverty and Ideology in Asia, Contradictory Pressures, Uneasy Resolutions*, Macmillan, Houndsmill, Basingstoke, pp.148-177.

Cockburn, Cynthia (1981) 'The Material of Male Power', *Feminist Review*, no.9, pp 41-58.

Cockburn, Cynthia (1983) *Brothers: Male Dominance and Technological Change*, Pluto Press, London.

Cockburn, Cynthia (1986) 'Women and Technology: Opportunity is Not Enough' in Purcell, Kate, Stephen Wood, Alan Waton and Sheila Allen (eds.) *The Changing Experience of Employment: Restructuring and Recession,* Macmillan, London, pp. 173-87.

Collinson, David, L (1992) *Managing the Shopfloor, Subjectivity, Masculinity and Workplace Culture,* Walter de Gruyter, Berlin, New York.

Connell, R. W. (1987) *Gender and Power, Society, the Person and Sexual Politics*, Polity Press, Cambridge, UK.

D'Mello Bernard (1992) 'Thinking about the Labour Process, Some Clues from Western Studies', *Economic and Political Weekly*, May, pp. M-63- M-370.

Dennis, Carolyne (1992) 'The Christian Churches and the Women's Experience of Structural Adjustment in Nigeria 'In Haleh Afshar and Carolyn Dennis (eds.) *Women and Adjustment in the Third World*, Macmillan, London, pp.179-204.

Deshpande, Sudha and L K Deshpande (1992) 'New Economic Policy and Female Employment', *Economic and Political Weekly*, 27(41), Oct. 10, pp 2248-2252.

Deshpande, Sudha (1993) 'Structural Adjustment and Feminisation ', in Alakh N Sharma and Seema Singh (eds.) *Women and Work Changing Scenario in India*, ISLE and BR Publishers, Patna, Delhi, pp. 71-85.

Dickens, Linda (1992) *Whose Flexibility? Discrimination and Equality Issues in Atypical Work,* The Institute of Employment Rights, The College Hill Press Ltd.

Elson Diane and Ruth Pearson (1981) 'Nimble Fingers Make Cheap Workers: An Analysis of Women's Employment in Third World Export Manufacturing', *Feminist Review*, No. 7, pp. 87-107.

Elson Diane (1982) 'The Differentiation of Children's Labour in the Capitalist Labour Market', *Development and Change*, Vol. 13, pp 479-497.

Elson, Diane (1983) 'Nimble Fingers and other Fables', in Wendy Chapkis and Cynthia Enloe (eds.), *Of Common Cloth: Women in the Global Textile Industry*, Transnational Institute, Amsterdam, pp.15-24.

Elson, Diane (1994) 'Micro, Meso, Macro: Gender and Economic Analysis in the Context of Policy Reform' In Isabella Bakker (ed.) *The Strategic Silence, Gender and Economic Policy,* Zed Books, London, pp.33-45.

Elson, Diane (1996) 'Appraising recent developments in the world market for nimble fingers: Accumulation, regulation, organisation' in Amrita Chhachhi and Renee Pittin (eds.) *Confronting State, Capital and Patriarchy: Women Organising in the Process of Industrialisation,* Macmillan, New York, pp.35-55.

Fine, Michele (1994) 'Working the Hyphens: Reinventing Self and Other in Qualitative Research' in Norman K. Denzin and Yvonna S. Lincoln (eds.) *Handbook of Qualitative Research,* Sage Publications, California, London, New Delhi, pp.70-82.

Ford, A (1985) *Men,* Weidenfeld and Nicolson, London.

Foucault Michel (1979) *Discipline and Punish: The Birth of the Prison*, Pantheon Book, New York.

Foucault Michel (1982) 'The Subject and Power', *Critical Enquiry*, 8 (4), pp.777-789.

Frobel, Folker, Jurgen Heinrichs and Otto Kreye (1980) *The New International Division of Labour: Structural Unemployment in Industrialised Countries and Industrialisation in Developing Countries,* Cambridge University Press, Cambridge, London.

Fuentes, Annette and Barbara Ehrenreich (1983) *Women in the Global Factory*, South End Press, Boston.

Game, Ann and Rosemary Pringle (1983) *Gender at Work*, Allen and Unwin, Sydney.

Goddard, Victoria and Benjamin White (1982) 'Child Workers and Capitalist Development: An Introductory Note and Bibliography' in *Development and Change*, 13 (4), 465-477.

Goldin, C. (1994), 'The U-shaped female labour force function in economic development and economic history', *NBER Working Paper Series*, No.4707, National Bureau of Economic Research, Cambridge.

Goldstein, Nace (1989) 'Silicon Glen: Women and Semi-conductor Multinationals', in Diane Elson and Ruth Pearson (eds.) *Women's Employment and Multinationals in Europe,* Macmillan Press, Basingstoke, pp. 111-128.

Gothoskar, Sujata (1992) 'Trends in Employment in Major Multinationals in India' Unpublished, Bombay.

Grossman, Rachel (1980) 'Women's Place in the Integrated Circuit ' *Radical America* 14, Jan-Feb., pp. 29-49.

Grown, Caren (1994) 'Structural Adjustment, Demographic Change and Population Policies: Some Preliminary Notes ' in Isabella Bakker (ed.) *The Strategic Silence, Gender and Economic Policy,* Zed Books Ltd, London, pp. 61-70.

Haraway, Donna (1988) 'Situated Knowledges: The Science Question in Feminism and the Privilege of the Partial Perspective', *Feminist Studies,* 14 (3), pp. 575-599.

Harding, Sandra (1991) *Whose Science? Whose Knowledge? Thinking from Women's Lives,* Cornell University Press, Ithaka.

Harding, Sandra (1993) 'Rethinking Standpoint Epistemology: "What Is Strong Objectivity"?' in Linda Alcoff and Elizabeth Potter (eds.) *Feminist Epistemologies*, Routledge, New York and London, pp. 49-82.

Hartsock, Nancy (1983) 'The Feminist Standpoint: Developing the Ground for a Specifically Feminist Historical Materialism' in Sandra Harding and Merill.B Hintikka (eds.) *Discovering Reality: Feminist Perspective on Epistemology, Metaphysics, Methodology and Philosophy of Science,* Dodrecht, London, Reidel, pp. 283-310.

Henriques, Julian Wendy Hollway, Cathy Urwin, Couze Venn and Valerie Walkerdine (1998) (eds.) *Changing the Subject: Psychology, Social Regulation and Subjectivity,* Routledge, London, New York, pp. 227-263.

Hollway, Wendy (1998) 'Gender difference and the production of subjectivity' in Henriques, Julian, Wendy Hollway, Cathy Urwin, Couze Venn and Valerie Walkerdine (eds.) *Changing the Subject: Psychology, Social Regulation and Subjectivity,* Routledge, London, New York

Huws, Ursula. Jennifer Hurstfield and Riki Holtmaat (1989) *What Price Flexibility? The Casualisation of Women's Employment,* Low Pay Unit, London.

Indian Investment Centre (1995) *Facilities, Incentives, Policies and Procedures for 100% Export Oriented Units and Units in the Free Trade Zone/Export Processing Zones,* A GOI Publication, New Delhi.

Ingham, M (1984) *Men: The Male Myth Exposed,* Century Publishing, London.

International Labour Office (1995) Home Work, *International Labour Conference,* Report V (1), 82nd Session.

Jenkins, Rhys (1991) *Transnational Corporations and Uneven Development: Internationalisation of Capital and the Third World,* Routledge, London, New York.

Jenson, Jane, Elisabeth Hagen and Ceallaigh Reddy (eds.) (1988) *Feminisation of the Labour Force*, Polity Press, Oxford.

Jenson, Jane (1989) 'The talents of women, the skills of men: flexible specialization and women', in Stephen Wood (ed.) *The Transformation of Work? Skill, flexibility and the labour process*, Unwin Hyman Ltd, London, pp.141-155.

Jhabvala, Renana (1985) *Closing Doors*, SETU Publications, Ahmedabad.

Joekes, Susan (1986) *Industrialisation, Trade and Female Employment: Experience of the 1970's and After,* Instraw, Domincan Republic.

Kalpagam, U (1994) 'Labour in Small Industry: The Case of the Garment Export Industry in Madras City', in U Kalpagam *Labour and Gender, Survival in Urban India*, Sage Publications, New Delhi, pp.155-192.

Knights David (1990) 'Subjectivity, Power and the Labour Process', in David Knights and Hugh. Willmott (eds.), *Labour Process Theory*, Macmillan, Basingstoke, pp. 297-335.

Kondo, Dorinne K (1990) *Crafting Selves, Power, Gender and Discourse of Identity in a Japanese Workplace,* The University of Chicago Press, Chicago and London.

Kumar, H L (1995) *What everybody should know about labour laws*, Universal Book Traders, Delhi.

Lal, Jayati (1996) 'Situating Locations: The Politics of Self, Identity and "Other" in living and Writing the Text', in Diane L. Wolf (ed.) *Feminist Dilemmas in Fieldwork*, Westview Press, Boulder, Oxford, pp185-210.

Liddle, Joanna and Rama Joshi (1986) *Daughters of Independence, Gender, Caste and Class in India,* Zed Books Ltd., London.

Liff, Sonia (1986) 'Technical Change and Occupational Sex-Typing' in David Knights and Hugh Willmott (eds.) *Gender and the Labour Process,* Gower Publishing Company, England, U.S.A., pp 74-93.

Lim, Linda (1990) 'Women's Work in Export Factories: The Politics of a Cause' in Irene Tinker (ed.) *Persistent Inequalities, Women and World Development,* Oxford University Press, Oxford, New York pp. 101-119.

Lukes, Steven (1974) *Power: A radical view,* Macmillan, London.

Mason, Jennifer (1996) *Qualitative Researching*, Sage Publications, London.

Mathur, A. (1992) 'Separating Facts from Folklore', *Indian Journal of Labour Economics,* July-September.

McCloskey, Donald N (1985) *The Rhetoric of Economics*, University of Wisconsin |Press, Wisconsin, USA.

The McGraw Hill Encyclopaedia of Economics (1993) edited by Greenwald, Douglas McGraw Hill, London.

Mies, Maria (1986) *Patriarchy and Accumulation on a World Scale, Women in the International Division of Labour,* Zed Press, London.

Mirowski, Philip (1989) *More Heat Than Light,* Cambridge University Press, New York.

Mitter, Swasti (1986) *Common Fate Common Bond, Women in the Global Economy*, Pluto Press, London.

Mohanty, Chandra Talpade (1991) 'Under Western Eyes: Feminist Scholarship and Colonial Discourses', in Chandra Talpade Mohanty, Ann Russo, and Lourdes Torres *Third World Women and the Politics of Feminism,* Indiana University Press, Bloomington, pp 51-80.

Morgan, David, H.J (1992) *Discovering Men*, Routledge, London, New York.

Morris, Arthur S. and Stella Lowder (1992) 'Flexible Specialization: The Application of Theory in a Poor - Country Context: Leon, Mexico', *International Journal of Urban and Regional Research*, pp. 190-201.

National Sample Survey Organisation (1990), Results of the Fourth Quinquennial Survey on Employment and Unemployment (All India), NSSO, 43rd Round, *Sarvekshna* Special Number, New Delhi, September.

Ong, Aihwa (1987) *Spirits of Resistance and Capitalist Discipline: Factory Women in Malaysia*, State University of New York Press, Albany.

Ong, Aihwa (1988) 'Colonialism and Modernity: Feminist Re-presentations of Women in Non-Western Societies', *Inscriptions* 3 (4), pp.79-93.

Oppenheimer, Valerie, Kincade (1970) *The Female Labour Force in the United States, Demographic and Economic Factors Governing Growth and Changing Composition*, Institute of International Studies, University of California, Berkeley.

Pampel, Fred C., and Kazuko Tanaka (1986) 'Economic development and female labour force participation: A reconsideration', *Social Forces,* 64(3), March, pp 599-619.

Parpart, Jane L (1993) 'Who is the 'Other'? A Postmodern Feminist Critique of Women and Development Theory and Practice', *Development and Change*, 24 (3), pp. 439-464.

Pearson, Ruth (1991) 'Male Bias and Women's Work in Mexico's Border Industries', in Elson Diane (ed.) *Male Bias in the Development Process*, Manchester University Press, Manchester, New York, pp.133-163.

The Penguin Dictionary of Sociology (1984) edited by Nicholas, Abercrombie, Stephen Hill and Bryan S. Turner, London, Allen Lane.

Phillips, Anne and Barbara Taylor (1980) 'Sex and Skill: Notes Towards a Feminist Economics', *Feminist Review*, No 6, pp. 79-88.

Phillips, Anne (1983) 'Review of Brothers', *Feminist Review*, no.15, pp. 101-4.

Piore, Michael J and Charles F. Sabel (1984) *The Second Industrial Divide: Possibilities for Prosperity*, Basic Books, New York.

Pollert, Anna (1987)' "The Flexible Firm": A Model in Search of Reality or a Policy in Search of a Practice?' *Warwick Papers in Industrial Relations*, no.19. Coventry: Warwick University.

Porpora, Douglas V., Mah Hui Lim and Usanee Prommas (1989) 'The Role of Women in the International Division of Labour: The Case of Thailand', *Development and Change*, Vol.20, pp. 269-294.

Prugl, Elisabeth and Eileen Boris (1996) *Homeworkers in global perspective: invisible no more*, Routledge, London.

Pyke, Karen D (1996) 'The interdependence of gender, class and interpersonal power', *Gender and Society*, October, 10 (5), pp.527-549.

Pyle, Jean (1990) 'Export led development and the underemployment of women: the impact of discriminatory development policy in the Republic of Ireland', In Kathryn Ward (ed.) *Women, Workers and Global Restructuring*, ILR Press, Ithaka, pp.85-112.

Rao, Rukmani Vijay and Sahba Husain (1991) 'Invisible Hands- The Women Behind India's Export Earnings' in Nirmala Banerjee (ed.) *Indian Women in a Changing Industrial Scenario* Sage Publishers, New Delhi, London, pp.133-200.

Razavi, Shahrashoub (1993) 'Fieldwork in a Familiar Setting: The Role of Politics at the National, Community and Household Levels' In Stephen Devereux and John Hoddinott (eds.) *Fieldwork in Developing Countries*, Boulder, Lynn Reinner, pp.152-163.

Safa, Helen I. (1981) 'Runaway Shops and Female Employment: The Search for Cheap Labour', *Signs* 7(2), pp. 418-433.

Safa, Helen I and Peggy Antrobus (1992) 'Women and the Economic Crisis in the Caribbean' In Helen I Safa and Peggy Antrobus (eds.) *Unequal Burden Economic Crisis Persistent Poverty and Women's Work*, Westview Press, Boulder.

Savara, Meera (1982) *Changing Trends in Women's Employment*, Himalaya Publishing House, Bombay.

Scott, Alison MacEwen (1991) 'Informal sector or female sector? : gender bias in urban labour market models' in Elson Diane (ed.) *Male Bias in the Development Process*, Manchester University Press, Manchester, New York, pp.105-132.

Seidler, Victor .J. (1991) *Recreating sexual politics: Men, feminism and politics,* Routledge, London.

Sen, Amartya (1990) *On Ethics & Economics*, Blackwell, Oxford, UK, Cambridge USA.

Sen Illina (ed.) (1990) *A Space Within the Struggle,* Kali for Women, New Delhi.

Sewell, William H., Jr. (1989) 'Gender History and Deconstruction: Joan Wallach Scott *Gender and the Politics of History', CSST* Working Paper, no.34 Program in the Comparative Study of Social Transformation, Ann Arbor, Mich.

Shah, Nandita, Sujata Gothosker, Nandita Gandhi and Amrita Chachhi (1994) 'Structural Adjustment, Feminisation of Labour Force and Organisational Strategies', *Economic and Political Weekly*, April 30, pp. WS 39- WS 48.

Shaheed, Farida (1989) 'Purdah and Poverty in Pakistan' in Haleh Afshar and Bina Agarwal (1989) (eds.) *Women, Poverty and Ideology in Asia, Contradictory Pressures, Uneasy Resolutions*, Macmillan, Houndsmill, Basingstoke, pp. 17-42.

Sharma, RN and Chandan Sengupta (1984) *Women Employment at SEEPZ*, Bombay Mimeograph TISS, Report prepared for Indian Council for Research on International Economic Relations.

Skeggs, Beverley (1997) *Formations of Class and Gender,* Sage Publications, London, California, New Delhi.

Smith, Dorothy (1990) *The Conceptual Practices of Power: A Feminist Sociology of Knowledge*, Northeastern University Press, Boston.

Standing, Guy (1989) 'Global Feminisation through Flexible Labour', *World Development,* 17 (7), pp 1077-1095.

Strassman, Diane L. (1993) 'The Stories of Economics and the Power of the Storyteller', *History of Political Economy,* 25 (1), pp. 147-165.

Strassman Diane L. (1994) 'Feminist Thought and Economics; Or, What do the Visigoths Know?' in *AEA Papers and Proceedings,* May, pp. 153-158.

Tilly, Louise A. and Joan W. Scott (1987) *Women Work and Family*, Methuen, New York, London.

Walby, Sylvia (1989) 'Flexibility and the changing sexual division of labour' in Stephen Stephen Wood (ed.) *The Transformation of Work? Skill, flexibility and the labour process,* Unwin Hyman Ltd, London, pp.127-140.

Walsh, J. (ed.) (1987) 'Capital Restructuring and the British Textile Industry: A Case Study', *Industrial Relations Unit, University of Warwick.*

Wolf, Diane L (1992) *Factory Daughters: Gender, Household Dynamics, and Rural Industrialization in Java,* University of California Press, Berkley.

Wolf, Diane L. (1996) *Feminist Dilemmas in Fieldwork*, Westview Press, Boulder, Oxford.

Women Working World-wide (1991) *Common Interests, Women Organising in Global Electronics,* W.W.W., London

Wood, Stephen (1989) 'The transformation of work' in Stephen Wood (ed.) *The Transformation of Work? Skill, flexibility and the labour process,* Unwin Hyman Ltd, London, pp 1-43

Wright, Erila Olin (1978) 'Race, class and income inequality', *American Journal of Sociology*, 83 (6), pp. 1368-97

Zimbalist, Andrew. (1979) (ed.) *Case Studies on the Labour Process*, Monthly Review Press, London, New York